ATTACHMENTA

PROPOSED 15-DAY MODIFCATIONS

REGULATION FOR THE MANAGEMENT OF HIGH GLOBAL WARMING POTENTIAL REFRIGERANTS FOR STATIONARY SOURCE

15-DAY MODIFCATIONS:

REGULATION FOR THE MANAGEMENT OF HIGH GLOBAL WARMING POTENTIAL REFRIGERANTS FOR STATIONARY SOURCES

NOTE: This document is written in a style to indicate changes from the language proposed after the publication of the proposal. All originally proposed language is indicated in plain text. All additions to that language are indicated by <u>underlined</u> text. All deletions to that language are indicated by <u>strikeout</u>. The one exception is underlined text in the chart in subsection 95384(f). The terms "before" and "on or after" in this chart were underlined in the original proposed regulatory language for emphasis, so the underlined text does not indicate a modification.

Subarticle 6 5: MANAGEMENT OF HIGH GLOBAL WARMING POTENTIAL REFRIGERANTS FOR STATIONARY SOURCES

§95380. Purpose.

The purpose of this subarticle is to reduce emissions of high global warming potential refrigerants from stationary, non-residential refrigeration equipment and from the installation and servicing of <u>stationary</u> refrigeration and air-conditioning appliances using high-GWP refrigerants.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§95381. Applicability.

- (a) This subarticle applies to any person who owns or operates a stationary refrigeration system, as defined in this subarticle. This subarticle also applies to any person who installs, repairs, maintains, services, replaces, recycles, or disposes of a <u>stationary</u> refrigeration or air-conditioning appliance, and to any person who distributes or reclaims refrigerants with high global warming potential.
- (b) The provisions of this subarticle do not apply to tactical support equipment.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§95382. Definitions.

- (a) For the purposes of this subarticle, the following definitions shall apply:
- (1) "Additional refrigerant charge" means the quantity, in pounds, of refrigerant added to a refrigeration system or appliance in order to bring the system to a full charge. "Additional refrigerant charge" does not include an initial refrigerant charge.
- (2) "AHRI" means the Air-Conditioning, Heating and Refrigeration Institute.
- (3) "Air-conditioning" means any stationary, non-residential appliance, including a computer-room air conditioner, that provides cooling to a space to an intended temperature of not less than 68°F for the purpose of cooling objects or occupants.
- (4) "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.
- (5) "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.
- (6) "Appliance" means any device which contains and uses a high-GWP refrigerant, including any air conditioner, refrigerator, chiller, freezer, or refrigeration system.
- (7) "ASHRAE" means the American Society of Heating, Refrigerating and Air-Conditioning Engineers.
- (8) "Automatic leak detection system" means a calibrated device using continuous monitoring for detecting leakage of refrigerants that on detection, alerts the operator, and may be either:

- (A) A direct system that automatically detects the presence in air of refrigerant leaked from a refrigeration system; or
- (B) An indirect system that automatically interprets measurements (e.g. temperature or pressure) within a refrigeration system that indicate a refrigerant leak (e.g., in refrigerated cases and other locations in the system) and alerts the operator to the presence of a refrigerant leak.
- (9) "Certified reclaimer" means a person who is a certified reclaimer in accordance with Title 40 of the Code of Federal Regulations, Part 82, §82.164.
- (10) "Certified refrigerant recovery or recycling equipment" means any refrigerant recovery or recycling equipment that meets the standards specified in Title 40 of the Code of Federal Regulations, Part 82, §82.152.
- (11) "Certified technician" means a person who holds a current, valid, and applicable certificate pursuant to Title 40 of the Code of Federal Regulations, Part 82, §82.40 or §82.161.
- (12) "Change of ownership" means a transfer of the title of a facility subject to this subarticle.
- (13) "Chlorofluorocarbon" or "CFC" means a class of compounds primarily used as refrigerants, consisting of only chlorine, fluorine, and carbon.
- (14) "Commercial refrigeration" means a refrigeration appliance utilized in the retail food and cold storage warehouse sectors. "Retail food" includes the refrigeration equipment found in supermarkets, convenience stores, restaurants and other food service establishments. "Cold storage" includes the equipment used to store meat, produce, dairy products, and other perishable goods.
- (15) "Component" means a part of a refrigeration system or appliance (including condensing units, compressors, condensers, evaporators, receivers) and all of its connections and subassemblies, without which the refrigeration system or appliance will not properly function or will be subject to failures.

- (16) "Computer-room air conditioner" means a central air conditioner specifically designed for use in data processing areas, maintaining an ambient temperature of approximately 72°F and a relative humidity of approximately 52 percent.
- (17) "Continuous monitoring" means measuring the ambient concentration of refrigerant using electronic or mechanical sensors or interpreting measurements (e.g. temperature or pressure) within a refrigeration system that indicate a refrigerant leak in real time.
- (18) "Detected refrigerant leak" means a refrigerant leak that is known to the owner or operator, or should reasonably have been known to the owner or operator.
- (19) "Direct emissions" means high-GWP refrigerant emissions from a facility that are emitted by refrigeration systems under the operational control of a facility owner or operator. Direct emissions are calculated as the total weight in pounds of each type of high-GWP refrigerant that was charged into a refrigeration system minus the total weight in pounds of each type of high-GWP refrigerant that was recovered from a refrigeration system, as reported in the annual Facility Stationary Refrigeration report pursuant to section 95388.
- (20) "Enclosed building or structure" means a building or structure with a roof and walls that prevent wind from entering the facility.
- (21) "Equipment type" means commercial refrigeration, industrial process refrigeration, or other refrigeration.
- (22) "Executive Officer" means the Executive Officer of the California Air Resources Board, or his or her delegate.
- (23) "Facility" means any property, plant, building, structure, stationary source, stationary equipment or grouping of stationary equipment or stationary sources located on one or more contiguous or adjacent properties, in actual physical contact or separated solely by a public roadway or other public right-of way, and

under common operational control, that includes one or more refrigeration systems or appliance subject to this subarticle. Operators of military installations may classify such installations as more than a single facility based on distinct and independent functional groupings within contiguous military properties.

- (24) "Facility identification number" means a unique identification number provided by the Executive Officer for each facility with one or more refrigeration systems in operation, pursuant to section 95383.
- (25) "Follow-up verification test" means those tests that involve checking the repairs within 30 days of the refrigeration system's returning to normal operating characteristics and conditions. "Follow-up verification tests" for a refrigeration system from which the refrigerant charge has been evacuated means a test conducted after the refrigeration system or portion of the refrigeration system has resumed operation at normal operating characteristics and conditions of temperature and pressure, except in cases where sound professional judgment dictates that these tests will be more meaningful if performed prior to the return to normal operating characteristics and conditions. "Follow-up verification test" for a refrigeration system from which the refrigerant charge has not been evacuated means a reverification test conducted after the initial verification test and usually within 30 days of returning to normal operating characteristics and conditions. Where a refrigeration system is not evacuated, it is only necessary to complete any required changes to return the refrigeration system to normal operating characteristics and conditions.
- (26) "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 of the following three methods:
 - (A) Use of the equipment manufacturer's specifications of the full charge;

- (B) Use of calculations based on component sizes, density of refrigerant, volume of piping, seasonal variances, and other relevant considerations; or
- (C) 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.
- (27) "Global warming potential" or "GWP" means the radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time.
- (28) "Global warming potential value" or "GWP value" means the 100-yr GWP value first published by the IPCC in its Second Assessment Report (SAR) (IPCC, 1995); or if a 100-yr GWP value was not specified in the IPCC SAR, it means the GWP value published by the IPCC in its Fourth Assessment A-3 Report (AR4) (IPCC, 2007); or if a 100-yr GWP value was not specified in the IPCC AR4, then the GWP value will be determined by the Executive Officer based on data, studies and/or good engineering or scientific judgment. Both the 1995 IPCC SAR values and the 2007 IPCC AR4 values are published in table 2.14 of the 2007 IPCC AR4. The SAR GWP values are found in column "SAR (100-yr)" of Table 2.14.; the AR4 GWP values are found in column "100 yr" of Table 2.14."
- (29) "High-GWP refrigerant" means a compound used as a heat transfer fluid or gas that is: (A) a chlorofluorocarbon, a hydrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or (B) any compound or blend of compounds, with a GWP value equal to or greater than 150, or (C) any ozone depleting substance as defined in Title 40 of the Code of Federal Regulation, Part 82, §82.3.
- (30) "Hydrochlorofluorocarbon" or "HCFC" means a class of compounds primarily used as refrigerants, consisting of only hydrogen, chlorine, fluorine, and carbon.
- (31) "Hydrofluorocarbon" or "HFC" means a class of compounds primarily used as refrigerants, consisting of only hydrogen, fluorine, and carbon.

- (32) "Indirect emissions" means any emissions that are a consequence of the activities of a facility but occur at sources owned or controlled by another person related to energy consumed for electricity, heat, steam, and cooling.
- (33) "Industrial process refrigeration" means complex customized appliances used in the chemical, pharmaceutical, petrochemical and manufacturing industries that are directly linked to the industrial process. "Industrial process refrigeration" includes industrial ice machines, appliances used directly in the generation of electricity, and ice rinks. Where one appliance is used for both industrial process refrigeration and other applications, it will be considered industrial process refrigeration equipment if 50 percent or more of its operating capacity is used for industrial process refrigeration.
- (34) "Industrial process shutdown" means that an industrial process or facility temporarily ceases to operate or manufacture whatever is being produced at that facility.
- (35) "Initial refrigerant charge" means the quantity, in pounds, of high-GWP refrigerant added to a refrigeration system or appliance in order to bring the system to a full charge upon initial installation of a refrigeration system or appliance.
- (36) "Initial verification test" means a leak test that is conducted as soon as practicable after the repair is completed. "Initial verification test" with regard to leak repairs that require the evacuation of the refrigeration system or portion of the refrigeration system, means a test conducted prior to the replacement of the full charge and before the refrigeration system or portion of the refrigeration system has reached operation at normal operating characteristics and conditions of temperature and pressure. "Initial verification test" with regard to repairs conducted without the evacuation of the full charge means a test conducted as soon as practicable after the conclusion of the repair work.

- (37) "Intended to be operated year round" means a refrigeration system at a facility that is not a seasonal facility.
- (38) "Leak inspection" means an inspection of a refrigeration system to detect a leak of a high-GWP refrigerant.
- (39) "Low temperature refrigeration system" means a commercial or industrial refrigeration system used for frozen products.
- (40) "Medium temperature refrigeration system" means a commercial or industrial refrigeration system used for chilled products.
- (41) "Newly constructed" means a facility that is not yet operational, or that has been operational for less than 6 months.
- (42) "Non-certified technician" means a person who installs, maintains, services, repairs, modifies, or disposes of refrigeration or air-conditioning appliances that does not hold a current, valid, and applicable certificate pursuant to Title 40 of the Code of Federal Regulation, Part 82, §82.161.
- (43) "Non-refillable cylinder" means a cylinder with a refrigerant capacity of two pounds or greater that is designed not to be refilled and is used in the servicing, maintenance or filling of a refrigeration system, appliance, motor vehicle airconditioning system, or heat pump equipment.
- (44) "Normal operating characteristics and conditions" means a refrigeration system operating temperatures, pressures, fluid flows, speeds, and other characteristics, including full charge of the refrigeration system that would be expected for a given process load and ambient condition during operation. Normal operating characteristics and conditions are marked by the absence of atypical conditions affecting the operation of the refrigeration system.
- (45) "Operating" means the use of a refrigeration system for cooling or freezing. A refrigeration system is considered to be operating or in operation for the entirety of

any calendar month where it is used for cooling or freezing in any manner for more than a total of 24 hours.

- (46) "Operator" means the entity having operational control of a facility.
- (47) "Other refrigeration" means any stationary, non-residential appliance that is used for an application other than industrial process refrigeration, commercial refrigeration, or air-conditioning, or is used for two or more applications including industrial process refrigeration, commercial refrigeration, or air-conditioning.
- (48) "Owner" means the entity having title of the facility which is subject to this subarticle.
- (49) "Perfluorocarbon" or "PFC" means a class of compounds consisting only of carbon and fluorine.
- (50) "Person" means any person, firm, association, organization, partnership, business trust, corporation, limited liability company, company, federal, state, or local governmental agency or public district.
- (51) "Reclaim" means to reprocess refrigerant to all of the specifications specified in Title 40, Code of Federal Regulations, Part 82, §82.152.
- (52) "Recover" means to remove refrigerant in any condition from an appliance and to store it in an external container without necessarily testing or processing it in any way.
- (53) "Recycle" means to extract refrigerant from an appliance and clean refrigerant for reuse without meeting all of the requirements for reclamation. In general, recycled refrigerant is refrigerant that is cleaned using oil separation and single or multiple passes through devices, such as replaceable core filter-driers, which reduce moisture, acidity, and particulate matter.
- (54) "Refillable cylinder" means a cylinder with a refrigerant capacity of two pounds or greater that is designed to be refilled and is used in the servicing, maintenance

or filling of a refrigeration system, appliance, motor vehicle air-conditioning system, or heat pump equipment.

- (55) "Refrigerant circuit" means the parts of a refrigeration system that are normally connected to each other (or are separated by isolation valves) and are designed to contain a high-GWP refrigerant. A single refrigerant circuit is defined by all piping and components that use refrigerant from a common reservoir of a high-GWP refrigerant.
- (56) "Refrigerant distributor or wholesaler" means a person to whom a product is delivered or sold for purposes of export, subsequent resale, or delivery to a certified technician, employer of a certified technician, appliance manufacturer, or another refrigerant distributor or wholesaler. "Refrigerant distributor or wholesaler" includes any person who imports refrigerant from outside of this state to distribute or sell refrigerant to a certified technician, employer of a certified technician, appliance manufacturer, or another refrigerant distributor or wholesaler, or who acts as an agent or broker in buying refrigerant.
- (57) "Refrigerant leak" means any discharge of refrigerant into the atmosphere from an appliance, certified refrigerant recovery or recycling equipment, refrigerant cylinder, or other container.
- (58) "Refrigerant leak detection device" means a device that can be calibrated to accurately detect and measure the ambient concentration of refrigerant at a minimum concentration level of 10 parts per million of vapor of a specific refrigerant or selection of refrigerants.
- (59) "Refrigeration system" means stationary, non-residential equipment that is an industrial process refrigeration, commercial refrigeration, or other refrigeration appliance with a single refrigerant circuit that requires more than 50 pounds of any combination of high-GWP refrigerant to maintain normal operating characteristics and conditions. "Refrigeration system" does not include an air-conditioning appliance. A single refrigeration system is defined by a single refrigerant circuit.

- (60) "Residential" means a residential dwelling containing four or fewer dwelling units on one lot or parcel.
- (61) "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.
- (62) "Retrofit" means the replacement of the refrigerant used in a refrigeration system with a refrigerant approved under the Significant New Alternatives Policy (SNAP) program pursuant to Title 40 of the Code of Federal Regulation, Part 82, §82.170, or a refrigerant approved by the Executive Officer, and related refrigeration system changes required to maintain the refrigeration system operation and reliability following refrigerant replacement.
- (63) "Seasonal adjustment" means the need to add refrigerant to a refrigeration system due to a change in ambient conditions caused by a change in season, followed by the subsequent removal of refrigerant in the corresponding change in season, where both the addition and removal of refrigerant occurs within one consecutive 12-month period after the initial installation of a refrigeration system or a repair of a refrigeration system requiring evacuation or partial evacuation of the refrigerant circuit.
- (64) "Seasonal facility" means a facility where the purpose of the refrigeration system(s) at a facility ceases to be required during certain seasons of the year.
- (65) "Stationary" means meeting at least one of the following conditions:
 - (A) Is installed in a building, structure, or facility.
 - (B) Is attached to a foundation, or if not so attached, will reside at the same location for more than 12 consecutive months.
 - (C) Is located at the same single location on a permanent basis (at least two consecutive years) and that operates at that single location at three months each year.

- (66) "System identification number" means a unique identification number for each refrigeration system at a facility. The system identification number is comprised of the facility identification number followed by a hyphen, followed by a three digit number starting at 001 sequentially assigned to each unique refrigeration system at a facility. For example, if a facility has a facility identification number of ARB000001, then the system identification number for the first refrigeration system would be ARB000001-001.
- (67) "System mothballing" means the intentional shutting down of a refrigeration system for a period of time greater than 60 days by the owners or operators of that facility, where the refrigerant has been evacuated from the refrigeration system or the affected component of the refrigeration system, at least to atmospheric pressure.
- (68) "Tactical support equipment" means equipment that meets military specifications, owned by the U.S. Department of Defense, the U.S. military services, or its allies, and used in combat, combat support, combat service support, tactical or relief operations, or training for such operations.
- (68 69) "Temperature classification" means low temperature refrigeration system, medium temperature refrigeration system, or other.
- (69 <u>70</u>) "Topping off" means adding refrigerant to a refrigeration system or appliance in order to bring the system to a full charge.
- (70 <u>71</u>) Total Evaporator Cooling Load" means the total cooling in British thermal units (Btus) per hour required to maintain a facility's refrigeration systems at the temperature for which they are designed. The total cooling for the evaporator cooling load does not include the cooling load of a facility's heating, ventilation, and air-conditioning systems, sub-cooling, heat of rejection, or pump heat.
- (71 72) "U.S. EPA" means the United States Environmental Protection Agency.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§95383. Registration Requirements for Facilities with Stationary Refrigeration Systems.

- (a) Refrigeration Systems with a Full Charge Greater Than or Equal to 2,000 Pounds. On or before March 1, 2012, the owner or operator of a facility with a refrigeration system that begins operation before January 1, 2012, with a full charge greater than or equal to 2,000 pounds of a high-GWP refrigerant, must register with the Executive Officer by providing the information specified in subsection (e). The owner or operator of a facility with a refrigeration system that begins operation on or after January 1, 2012, with a full charge greater than or equal to 2,000 pounds of a high-GWP refrigerant, must register with the Executive Officer by March 1 of the calendar year after the calendar year in which the refrigeration system begins operating at the facility.
- (b) Refrigeration Systems with a Full Charge Greater Than or Equal to 200 Pounds, but Less Than 2,000 Pounds. On or before March 1, 2014, the owner or operator of a facility with a refrigeration system that begins operation before January 1, 2014, with a full charge greater than or equal to 200 pounds, but less than 2,000 pounds, of a high-GWP refrigerant must register with the Executive Officer by providing the information specified in subsection (e). The owner or operator of a facility with a refrigeration system that begins operation on or after January 1, 2014, with a full charge greater than or equal to 200 pounds, but less than 2,000 pounds, of a high-GWP refrigerant must register with the Executive Officer by March 1 of the calendar year after the calendar year in which the refrigeration system begins operating at the facility.
- (c) Refrigeration Systems with a Full Charge Greater Than 50 Pounds, but Less Than 200 Pounds. On or before March 1, 2016, the owner or operator of a facility with a refrigeration system that begins operation before January 1, 2016, with a full

charge greater than 50 pounds, but less than 200 pounds, of a high-GWP refrigerant, must register with the Executive Officer by providing the information specified in subsection (e). The owner or operator of a facility with a refrigeration system that begins operation on or after January 1, 2016, with a full charge greater than 50 pounds, but less than 200 pounds, of a high-GWP refrigerant must register with the Executive Officer by March 1 of the calendar year after the calendar year in which the refrigeration system begins operating at the facility.

- (d) New Owners of Facilities. If there is a change of ownership of a facility that has been registered pursuant to this section, the new owner or operator, by March 1 of the calendar year after the change of ownership has occurred, must register with the Executive Officer by providing the information specified in subsection (e).
- (e) Registration Information Requirements. To register, the owner or operator must provide the following information to the Executive Officer:
 - (1) Facility information:
 - (A) Name of operator.
 - (B) Operator Federal Tax Identification Number.
 - (C) Facility North American Industry Classification System (NAICS) Business Type Code based on the 2007 NAICS United States structure.
 - (D) Facility Standard Industrial Classification (SIC) code.
 - (E) Name of facility, including a facility identifier such as store number.
 - (F) Facility mailing address including a street address, city, state, and zip code.
 - (G) Facility physical location address including a street address, city, state, and zip code.
 - (H) Facility contact person.
 - (I) Facility contact person phone number.

- (J) Facility contact person e-mail address.
- (2) Refrigeration system information provided for each refrigeration system:
 - (A) System identification number (assigned by the facility owner or operator).
 - (B) Equipment type.
 - (C) Equipment manufacturer.
 - (D) Equipment model or description.
 - (E) Equipment model year.
 - (F) Equipment serial number. The serial number(s) of the affected equipment or component must be recorded when present and accessible. When the affected equipment 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 equipment must be recorded in enough detail to permit positive identification.
 - (G) Physical location of a refrigeration system through schematic or floor plan with equipment locations clearly noted.
 - (H) Temperature classification The refrigeration system must be identified as a low temperature system, a medium temperature system, or other.
 - (I) Full charge of the refrigeration system.
 - (J) Type of high-GWP refrigerant(s) used.
- (f) Change of Ownership Requirements. Before any change of ownership, a person selling a refrigeration system must insure that it is free of refrigerant leaks through a leak inspection performed by a certified technician. In addition, a person selling a refrigeration system that has been registered pursuant to this section must inform the buyer of the registration requirements specified in this section and

must submit a change of ownership notification to the Executive Officer. The change of ownership notification must include the following information:

- (1) Seller information:
 - (A) Facility identification number.
 - (B) Name of owner or operator.
 - (C) Name of facility, including a facility identifier such as store number.
- (2) Buyer information:
 - (A) Name of owner or operator.
 - (B) Name of facility, including a facility identifier such as store number.
 - (C) Facility mailing address including a street address, city, state, and zip code.
 - (D) Facility contact person.
 - (E) Facility contact person phone number.
 - (F) Facility contact person e-mail address.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§95384. Implementation Fees for Facilities with Stationary Refrigeration Systems.

(a) *Initial Implementation Fee Upon Registration*. An implementation fee must be paid by each owner or operator of a facility with a refrigeration system with a full charge greater than or equal to 200 pounds of a high-GWP refrigerant. The fee is due and payable to the Executive Officer on the same date that the owner or

operator is required to register pursuant to section 95383. The amount of the fee is specified in subsection (c).

- (b) Annual Implementation Fee. An annual implementation fee must be paid by each owner or operator of a facility with a refrigerator system with a full charge greater than 200 pounds of a high-GWP refrigerant. The annual fee is due and payable to the Executive Officer no later than March 1 of each calendar year after the calendar year in which registration is required under section 95383. The amount of the implementation fee is specified in subsection (c).
- (c) Amount of Implementation Fee. The amount of the initial and annual implementation fee is based on the refrigeration system with the largest full charge that is operating at the facility, and is as follows:
 - (1) The initial and annual implementation fee for a facility with a refrigeration system with a full charge of 2,000 pounds or greater is \$370.
 - (2) The initial and annual implementation fee for a facility with a refrigeration system with a full charge of 200 pounds or greater, but less than 2,000 pounds is, \$170.
- (d) Facilities Exempt from Paying Fees. Notwithstanding subsections (a), (b), (c), and (f) of this section, the owner or operator is not required to pay the initial or annual implementation fee for any calendar year if during the previous calendar year all of the refrigeration systems at the facility have been maintained using the following advanced strategies and practices to reduce refrigerant charges and emissions of ozone-depleting substances and greenhouse gases.
 - (1) If the facility is not a newly constructed facility, all of the following criteria must be met:
 - (A) The facility must use only refrigerants with zero ozone-depleting potential; and
 - (B) The facility must use only refrigerants found acceptable by the U.S EPA Significant New Alternatives Policy (SNAP) program

- pursuant to Title 40 of the Code of Federal Regulation, Part 82, §82.170 for the specific end use; and
- (C) The facility must achieve an average HFC full charge equal to or less than 1.25 lbs. of refrigerant per 1000 Btu per hour total evaporator cooling load; and
- (D) The facility must achieve a facility-wide annual refrigerant leak rate, as defined in Title 40 of the Code of Federal Regulation, Part 82, §82.152, of 10% or less; and
- (E) The owner or operator must swear under penalty of perjury that the criteria specified in subsection (d)(1) have been met.
- (2) If the facility is a newly constructed facility, all of the following criteria must be met:
 - (A) The facility must use only refrigerants with zero ozone-depleting potential; and
 - (B) The facility must use only refrigerants found acceptable by the U.S EPA Significant New Alternatives Policy (SNAP) program pursuant to Title 40 of the Code of Federal Regulation, Part 82, §82.170 for the specific end use; and
 - (C) The facility must achieve an average HFC full charge equal to or less than 1.25 lbs. of refrigerant per 1000 Btu per hour total evaporator cooling load; and
 - (D) The owner or operator must swear under penalty of perjury that the criteria specified in subsection (d)(2) have been met.
- (e) Upon request by an authorized representative of the Executive Officer including a local Air Pollution Control Officer, the owner or operator claiming that the facility meets the criteria of subsection (d) must provide documentation to demonstrate that the criteria are met, and must provide a written statement as provided in subsection (d)(1)(E) or (d)(2)(D).

(f) Summary of Requirements to Pay Implementation Fees. The following table summarizes the requirements of section 95384 to pay implementation fees.

	Initial Implementation Fee Upon Registration	Annual Implementation Fee
Facilities with a refrigeration system that begin operation before January 1, 2012 with a full charge of 2,000 pounds or greater.	Amount: \$370 Due Date: The owner or operator must register and pay the fee by March 1, 2012.	Amount: \$370 Due Date: Fee is due by March 1, 2013, and each year thereafter.
Facilities with a refrigeration system that begin operation on or after January 1, 2012 with a full charge of 2,000 pounds or greater.	Amount: \$370 Due Date: The owner or operator must register and pay the fee by March 1 of the calendar year after the refrigeration system begins operating.	Amount: \$370 Due Date: By March 1 of the calendar year after the refrigeration system is required to be registered, and each year thereafter.
Facilities with a refrigeration system that begin operation before January 1, 2014 with a full charge of 200 pounds or greater, but less than 2,000 pounds.	Amount: \$170 Due Date: The owner or operator must register and pay the fee by March 1, 2014.	Amount: \$170 Due Date: Fee is due by March 1, 2015, and each year thereafter.
Facilities with a refrigeration system that begin operation on or after January 1, 2014 with a full charge of 200 pounds or greater, but less than 2,000 pounds.	Amount: \$170 Due Date: The owner or operator must register and pay the fee by March 1 of the calendar year after the refrigeration system begins operating.	Amount: \$170 Due Date: By March 1 of the calendar year after the refrigeration system is required to be registered, and each year thereafter.

(g) Fees collected pursuant to this section shall be deposited into the California Air Pollution Control Fund.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§95385. Leak Detection and Monitoring Requirements for Facilities with Stationary Refrigeration Systems.

- (a) Refrigeration Systems with a Full Charge Greater Than or Equal to 2,000 Pounds. The owner or operator of a refrigeration system with a full charge greater than or equal to 2,000 pounds of a high-GWP refrigerant must do the following:
 - (1) (A) Except as provided in subsection (a)(1)(B), Aafter January 1, 2011, the owner or operator of a refrigeration system that operates year round, or is intended to be operated year round, must conduct a leak inspection of the refrigeration system monthly using a refrigerant leak detection device, a bubble test, or observation of oil residue.
 - 1. The refrigerant circuit is located entirely within an enclosed building or structure, or
 - 2. The compressor, evaporator, condenser, or any other component of the refrigeration system(s) with a high potential for a refrigerant leak is located inside an enclosed building or structure.

If oil residue is observed, a leak inspection must be conducted using a calibrated refrigerant leak detection device or bubble test to confirm a refrigerant leak.

(B) A monthly leak inspection of the refrigeration system is not required <u>pursuant to subsection (a)(1)(A)</u> if an automatic leak detection system meeting the specifications provided in subsections 95385(a)(5) or 95385(a)(6) is used to monitor the refrigeration system.

- (2) By January 1, 2012, the owner or operator of a refrigeration system, that operates year round, or is intended to be operated year-round, must install an automatic leak detection system if:
 - (A) The refrigerant circuit is located entirely within an enclosed building or structure, or
 - (B) The compressor, evaporator, condenser, or any other component of the refrigeration system(s) with a high potential for a refrigerant leak is located inside an enclosed building or structure.
- (3) After January 1, 20112012, the owner or operator of a refrigeration system that does not operate with the refrigerant circuit located entirely within an enclosed building or structure must conduct a leak inspection once every three months using a calibrated refrigerant leak detection device, a bubble test, or observation of oil residue of all refrigerant circuit components that are not located within an enclosed building or structure or that are not monitored using an automatic leak detection system meeting the specifications provided in subsections 95385(a)(5) or 95385(a)(6). If oil residue is observed, a leak inspection must be conducted using a calibrated refrigerant leak detection device or bubble test to confirm a refrigerant leak.
- (4) If a facility has installed an automatic leak detection system which directly detects the presence in air of a high-GWP refrigerant, sensors or intakes must be placed so that they will continuously monitor the refrigerant concentrations in air in proximity of the compressor, evaporator, condenser, and other areas with a high potential for a refrigerant leak.
- (5) If a facility has installed an automatic leak detection system which detects the presence in air of a high-GWP refrigerant, the owner or operator must annually audit and calibrate the system using manufacturer recommended procedures, so that it:

- (A) Accurately detects a concentration level of 10 parts per million of vapor of the specific refrigerant or refrigerants used in the refrigeration system(s), and
- (B) Alerts the operator when a refrigerant concentration of 100 parts per million of vapor of the specific refrigerant or refrigerants used in the refrigeration system(s) is reached.
- (6) If a facility has installed an automatic leak detection system that automatically interprets measurements to indicate a refrigerant leak, the owner or operator must annually audit and calibrate the system, so that it will automatically alert the operator when measurements indicate a loss of refrigerant of 50 pounds or 10 percent of the refrigeration system full charge, whichever is less.
- (7) If an automatic leak detection system alerts the owner or operator pursuant to subsections 95385(a)(5) or 95385(a)(6), the owner or operator must ensure that a leak inspection is conducted within 24 hours after the system alert. The leak inspections must be conducted using a calibrated refrigerant leak detection device or a bubble test to confirm a refrigerant leak and determine the refrigerant leak location(s).
- (8) The owner or operator of a refrigeration system that does not operate, or is not intended to operate, year-round must conduct a leak inspection within 30 days after starting each operation of the refrigeration system, and every three months thereafter until the refrigeration system is shut down. The leak inspection must be conducted using a calibrated refrigerant leak detection device, a bubble test, or observation of oil residue. If oil residue is observed, a leak inspection must be conducted using a calibrated refrigerant leak detection device or bubble test to confirm a refrigerant leak. A leak inspection is not required after starting operation if there has been a leak inspection of the refrigeration system conducted within the preceding 90 days.

- (b) Refrigeration Systems with a Full Charge Greater Than or Equal to 200 Pounds, but Less Than 2,000 Pounds. After January 1, 2011, the owner or operator of a refrigeration system with a full charge greater than or equal to 200 pounds, but less than 2,000 pounds, of a high-GWP refrigerant, and that is intended to be operated year round, must conduct a leak inspection of the refrigeration system once every three months. The leak inspection must be conducted using a calibrated refrigerant leak detection device, a bubble test, or observation of oil residue. If oil residue is observed, a leak inspection must be conducted using a calibrated refrigerant leak detection device or bubble test to confirm a refrigerant leak.—A leak inspection of the refrigeration system is not required pursuant to this subsection (b) if an automatic leak detection system meeting the specifications provided in subsections 95385(a)(5) or 95385(a)(6) is used to monitor the refrigeration system.
- (c) Refrigeration Systems with a Full Charge Greater Than 50 Pounds, but Less Than 200 Pounds. After January 1, 2011, the owner or operator of a refrigeration system with a full charge greater than 50, but less than 200 pounds, of a high-GWP refrigerant, and that is intended to be operated year round, must annually conduct a leak inspection of the refrigeration system. The leak inspection must be conducted using a calibrated refrigerant leak detection device, a bubble test, or observation of oil residue. If oil residue is observed, a leak inspection must be conducted using a calibrated refrigerant leak detection device or bubble test to confirm a refrigerant leak. A leak inspection of the refrigeration system is not required pursuant to this subsection (c) if an automatic leak detection system meeting the specifications provided in subsections 95385(a)(5) or 95385(a)(6) is used to monitor the refrigeration system.
- (d) Requirements That Apply When Additional Refrigerant is Added to All Refrigeration Systems Regulated by this Subarticle. After January 1, 2011, the owner or operator of any refrigeration system with a full charge greater than 50 pounds of a high-GWP refrigerant must conduct a leak inspection each time an additional refrigerant charge equal to or greater than 5 pounds, or one percent of the refrigeration system full charge, whichever amount is greater, is added to a

refrigeration system. The leak inspection must be conducted using a calibrated refrigerant leak detection device, a bubble test, or observation of oil residue. If oil residue is observed, a leak inspection must be conducted using a calibrated refrigerant leak detection device or bubble test to confirm a refrigerant leak.

- (e) Refrigeration Systems Not Operated Year-Round. The owner or operator of a refrigeration system that does not operate, or is not intended to operate, year-round must conduct a leak inspection within 30 days after starting each operation of the refrigeration system, and once every three months thereafter until the refrigeration system is shut down. The leak inspection must be conducted using a calibrated refrigerant leak detection device, a bubble test, or observation of oil residue. A leak inspection is not required after starting operation if there has been a leak inspection of the refrigeration system conducted within the preceding 90 days.
- (e <u>f</u>) Alternative Test Methods. The leak inspections required by this section may be conducted using alternative test methods that are demonstrated to the written satisfaction of the Executive Officer to be equally or more accurate than using a calibrated refrigerant leak detection device or bubble test.
- (g) Leak Inspection Requirements if Oil Residue is Observed. If during a required leak inspection or at any time oil residue is observed indicating a refrigerant leak, a leak inspection must be conducted using a calibrated refrigerant leak detection device or bubble test to confirm a refrigerant leak.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§95386. Leak Repair Requirements for Facilities with Stationary Refrigeration Systems.

(a) Leak Repair Requirements. After January 1, 2011, the owner or operator of a refrigeration system must ensure that all detected refrigerant leaks are repaired as

provided in this section, and must maintain records pursuant to section 95389 of all refrigerant leak repairs.

- (b) Refrigerant Leak Repair 14-Day Requirement. A refrigerant leak must be repaired by a certified technician within 14 days of its detection, except in situations when a longer time period is allowed under subsections (c), (d), or (i) of this section.
- (c) Refrigerant Leak Repair 45-Day Allowance. The owner or operator of a refrigeration system has 45 days to repair a refrigerant leak or replace a leaking component(s) if one or more of the following conditions apply:
 - (1) A certified technician is not available to complete the repair or replace the component(s). A written record(s) must be kept pursuant to section 95389 to document that no certified technician was available within 14 days of the initial leak detection.
 - (2) The parts necessary to repair a refrigerant leak are unavailable, and the owner or operator obtains a written statement from the refrigeration system or component manufacturer or distributor stating that the parts are unavailable. A written record(s) must be kept pursuant to section 95389 to document that the necessary parts were not available within 14 days of the initial leak detection.
 - (3) The owner or operator has received an exemption from the Executive Officer pursuant to section 95397. A written record(s) must be kept pursuant to section 95389 to document that the owner or the operator has requested and received an exemption. If the owner or operator has submitted a request for an exemption, a refrigerant leak repair is not required until a final exemption determination is made by the Executive Officer.
 - (4 <u>3</u>) The refrigerant leak repair requires an industrial process shutdown that results in a process temporarily ceasing to manufacture the

intermediate or final product that is produced when the industrial process refrigeration appliance is in operation.

- (d) Refrigerant Leak Repair 120-Day Allowance. The owner or operator of a refrigeration system has 120 days to repair a refrigerant leak or replace a leaking component(s) if all of the following conditions apply:
 - (1) The facility owner or operator is an entity subject to Mandatory Greenhouse Gas Emissions Reporting requirements pursuant to section 95101 of the Health and Safety Code; and
 - (2) The refrigeration system is an industrial process refrigeration appliance; and
 - (3) The refrigerant leak repair requires an industrial process shutdown that results in a process temporarily ceasing to manufacture the intermediate or final product that is produced when the industrial process refrigeration appliance is in operation; and
 - (4) Written records are maintained as provided in section 95389 to document that all the conditions required under this subsection are met.
- (e) Initial Verification Test. An initial verification test must be conducted upon completion of refrigerant leak repairs.
- (f) Follow-up Verification Test. After the initial verification test has been conducted, a follow-up verification test must be conducted on the complete refrigeration system. If the refrigeration system was evacuated during the refrigerant leak repair, the follow-up verification test must be conducted when the system is operating at normal operating characteristics and conditions. If the refrigeration system was not evacuated during the refrigerant leak repair, the follow-up verification test requirement of this subsection is satisfied once required changes are made to return the refrigeration system to normal operating characteristics and conditions.

- (g) Refrigerant Leak Repair Requirements After An Unsuccessful Verification Test.
 - (1) If either an initial verification test or follow-up verification test indicate that a refrigerant leak is still occurring within the refrigeration system, the owner or operator must ensure repair of the refrigerant leak through a subsequent repair attempt(s) of the refrigerant leak within the time required for refrigerant leak repair by subsections (b), (c), or (d), or prepare a retrofit or retirement plan pursuant to section 95387.
 - (2) If a follow-up verification test pursuant to subsection 95386(f) indicates that a refrigerant leak has not been successfully repaired within the 14 days allowed for a refrigerant leak repair under subsection (b), and the owner or operator does not have an approved exemption pursuant to section 95397, then the owner or operator must either successfully repair the refrigerant leak within 45 days of the initial refrigerant leak detection or must prepare a retrofit or retirement plan pursuant to section 95387 within 60 days of the initial refrigerant leak detection.
 - (3) If a follow-up verification test pursuant to subsection 95386(f) indicates that a refrigerant leak has not been successfully repaired within the 45 days allowed for a refrigerant leak repair under subsection (c), and the owner or operator does not have an approved exemption pursuant to section 95397, the owner or operator must prepare a retrofit or retirement plan pursuant to section 95387 within 60 days of the initial refrigerant leak detection.
 - (4) If a follow-up verification test pursuant to subsection 95386(f) indicates that a refrigerant leak has not been successfully repaired within the 120 days allowed for a refrigerant leak repair under subsections (d), and the owner or operator does not have an approved exemption pursuant to section 95397, the owner or operator must prepare a retrofit or retirement plan pursuant to section 95387 within 135 days of the initial refrigerant leak detection.

- (h) Refrigerant Leak Repair Contractors License Requirement.
 - (1) Except as provided below in subsection(h)(2), all refrigerant leaks must be repaired by a certified technician holding a current and active California contractors license in the C38 Refrigeration Contractor licensing classification, or by an employee of a contractor with these qualifications. If the refrigeration system requiring service is also used in an air-conditioning application, it is acceptable for the refrigerant leak to be repaired by a certified technician holding a current and active California contractors license in the C20 Warm-Air Heating, Ventilating and Air-Conditioning Contractor licensing classification, or by an employee of a contractor with these qualifications.
 - (2) A current and active California contractors license is not required if:
 - (A) the refrigeration system service or refrigerant leak repair is performed by the facility owner or operator or its employees with wages as sole compensation, or
 - (B) the refrigeration system service or refrigerant leak repair is performed by the facility owner or operator through one undertaking or by one or more contracts, and the aggregate contract price for labor, materials, and all other items is less than five hundred dollars (\$500), or
 - (C) the refrigeration system service or refrigerant leak repair is performed pursuant to a contract entered into before January 1, 2011, by any political subdivision of the United States government or the State of California, or by any incorporated town, city, county, irrigation district, reclamation district, or other municipal or political corporation.
- (i) Refrigerant Leak Repair Requirements During System Mothballing. The leak repair requirements of this section shall not apply during the time that a refrigeration system is undergoing or is in system mothballing. The leak repair

requirements of this section shall resume on the day that the refrigeration system resumes operation at a facility.

(j) Refrigerant Leak Repair Requirements Exemption. If the owner or operator of a refrigeration system has received an exemption from the Executive Officer pursuant to section 95397, a refrigerant leak repair is not required during the time period the exemption is in effect. If the owner or operator of a refrigeration system has submitted a request for an exemption pursuant to section 95397, a refrigerant leak repair is not required until a final exemption determination is made by the Executive Officer. A written record(s) must be kept pursuant to section 95389 to document that the owner or the operator has requested or received an exemption.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§95387. Requirements to Prepare Retrofit or Retirement Plans for Facilities with Leaking Stationary Refrigeration Systems.

- (a) Retrofit or Retirement Plan Requirements.
 - (1) After January 1, 2011, the owner or operator of a refrigeration system with a refrigerant leak that has not been successfully repaired within the time required for refrigerant leak repair under subsection (b), (c), or (d) of section 95386 must prepare and implement a dated retrofit or retirement plan as provided in section 95386(g). The plan must establish a schedule to retrofit or retire a leaking refrigeration system no later than six months after the initial detection of the refrigerant leak, and all work must be completed during this six-month period.
 - (2) The retrofit or retirement plan must be kept at the site of the refrigeration system with a refrigerant leak. If a refrigeration system is to be retired and replaced, the plan must include information required under this subsection specific to the new refrigeration system to be constructed or installed. If a refrigeration system is to be retrofitted, the plan must include

information required under this subsection specific to the refrigeration system after the retrofit has been completed. A retrofit or retirement plan must include the following information:

- (A) The system identification number of the refrigeration system being retired or retrofitted.
- (B) Equipment type.
- (C) Equipment manufacturer.
- (D) Equipment model or description.
- (E) Intended physical location of the refrigeration system through schematic or floor plan with locations clearly noted.
- (F) Temperature classification The refrigeration system must be identified as a low temperature system, a medium temperature system, or other.
- (G) Full charge of the refrigeration system.
- (H) Type of high-GWP refrigerant(s) used.
- (I) If a refrigeration system is to be retired and replaced, a plan to dispose of the retired refrigeration system.
- (J) A timetable which includes, at a minimum:
 - 1. the date installation, construction, or retrofit of the refrigeration system is expected to begin, and
 - 2. the expected completion date of the installation, construction, or retrofit of the refrigeration system.
- (K) A signature by a representative of the facility, including the date signed.
- (b) Retrofit or Retirement Plan Requirements During System Mothballing. The retrofit or retirement requirements of this section shall not apply during the time that a refrigeration system is undergoing or is in system mothballing. The retrofit

or retirement requirements of this section shall apply on the day that the refrigeration system resumes operation at a facility.

(c) Retrofit or Retirement Plan Requirements Exemption. If the owner or operator of a refrigeration system has received an exemption from the Executive Officer pursuant to section 95397, the preparation and implementation of a retrofit or retirement plan is not required during the time period the exemption is in effect. If the owner or operator of a refrigeration system has submitted a request for an exemption pursuant to section 95397, the preparation and implementation of a retrofit or retirement plan is not required until a final exemption determination is made by the Executive Officer. A written record(s) must be kept pursuant to section 95389 to document that the owner or the operator has requested or received an exemption.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§95388. Reporting Requirements for Facilities with Stationary Refrigeration Systems.

- (a) Reporting Requirements for *Refrigeration Systems with a Full Charge Greater Than or Equal to 200 Pounds.* After January 1, 2011, the owner or operator of a facility with a refrigeration system in operation with a full charge greater than or equal to 200 pounds of a high-GWP refrigerant must annually submit to the Executive Officer a Facility Stationary Refrigeration Report (Annual Report) that contains the information specified below in subsections 95388(b)(1) and 95388(b)(2). Each Annual Report must provide this information for the previous calendar year and must be submitted by the following dates:
 - (1) By March 1, 2012, the owner or operator of a facility with a refrigeration system that begins operation before January 1, 2012, with a full charge greater than or equal to 2,000 pounds of a high-GWP refrigerant must submit an Annual Report for the 2011 calendar year. By March 1, 2013,

- and each calendar year thereafter, the owner or operator must submit an Annual Report providing information for the previous calendar year.
- (2) The owner or operator of a facility with a refrigeration system that begins operation on or after January 1, 2012, with a full charge greater than or equal to 2,000 pounds of a high-GWP refrigerant must submit the first Annual Report for the previous calendar year by March 1 of the calendar year after the refrigeration system begins operating at a facility. Subsequent Annual Reports for the previous calendar year must be submitted by March 1 of each year thereafter.
- (3) By March 1, 2014, the owner or operator of a facility with a refrigeration system that begins operation before January 1, 2014, with a full charge greater than or equal to 200 pounds of a high-GWP refrigerant must submit an Annual Report for the 2013 calendar year. By March 1, 2015, and each calendar year thereafter, the owner or operator must submit an Annual Report providing information for the previous calendar year.
- (4) The owner or operator of a facility with a refrigeration system that begins operation on or after January 1, 2014, with a full charge greater than or equal to 200 pounds of a high-GWP refrigerant must submit the first Annual Report for the previous calendar year by March 1 of the calendar year after the refrigeration system begins operating at a facility. Subsequent Annual Reports for the previous calendar year must be submitted by March 1 of each year thereafter.
- (b) The Annual Report must include the following information.
 - (1) Refrigeration system information. The following information must be provided for each refrigeration system:
 - (A) System identification number.
 - (B) Equipment type.
 - (C) Equipment manufacturer.
 - (D) Equipment model or description.

- (E) Equipment model year.
- (F) Equipment serial number. The serial number(s) of the affected equipment or component must be recorded when present and accessible. When the affected equipment 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 equipment must be recorded in enough detail to permit positive identification.
- (G) Physical location of a refrigeration system through schematic or floor plan with equipment locations clearly noted.
- (H) Temperature classification The refrigeration system must be identified as a low temperature system, a medium temperature system, or other.
- (I) Full charge of the refrigeration system.
- (J) Type of high-GWP refrigerant(s) used.
- (K) Date of initial installation.
- (2) Refrigeration system service and leak repair information. The following information for must be provided for each automatic leak detection system audit, leak inspection, and refrigeration system service or refrigerant leak repair that required an additional refrigerant charge of five pounds or more, or an additional refrigerant charge equal to or greater than one percent of the full charge, whichever amount is greater:
 - (A) Date leak detected, if applicable.
 - (B) Date of service provided or leak repair completed.
 - (C) Cause of refrigerant leak, if applicable.
 - (D) Description of service provided or leak repair completed
 - (E) Date(s) of initial verification test(s), if applicable.

- (F) Date(s) of follow-up verification test(s), if applicable.
- (G) Total additional refrigerant charge of each type of high-GWP refrigerant, if applicable.
- (H) Purpose for additional refrigerant charge (leak repair, topping off, initial refrigerant charge, or seasonal adjustment), if applicable.
- (I) Name of certified technician completing leak repair, if applicable.
- (J) The certified technician's identification number issued by an approved technician certification program pursuant to Title 40 of the Code of Federal Regulation, Part 82, §82.161, if applicable.
- (K) The certified technician's certification type(s) issued by an approved technician certification program pursuant to Title 40 of the Code of Federal Regulation, Part 82, §82.161, if applicable.
- (3) Refrigerant Purchases and Use Information. The following information must be provided on refrigerant purchase and use:
 - (A) The total weight in pounds of each type of high-GWP refrigerant that was purchased during the calendar year.
 - (B) The total weight in pounds of each type of high-GWP refrigerant that was charged into a refrigeration system during the calendar year.
 - (C) The total weight in pounds of each type of high-GWP refrigerant that was recovered from a refrigeration system during the calendar year.
 - (D) The total weight in pounds of each type of high-GWP refrigerant that was stored in inventory at the facility, or stored at a different location for use by the facility, on the last day of the calendar year.
 - (E) The total weight in pounds of high-GWP refrigerant that was shipped by the owner or operator for reclamation and destruction during the calendar year.

(d) Reporting Requirements for *Refrigeration Systems with a Full Charge Greater Than 50 Pounds, but Less Than 200 Pounds.* The owner or operator of a facility with a refrigeration system in operation with a full charge greater than 50 pounds, but less than 200 pounds, of a high-GWP refrigerant is not required to submit annual reports. However, owners and operators of these facilities must report to the Executive Officer the information specified in this section within 60 days of receipt of a request from the Executive Officer.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§95389. Recordkeeping Requirements for Facilities with Stationary Refrigeration Systems.

- (a) After January 1, 2011, the owner or operator of a facility with a refrigeration system in operation with a full charge greater than 50 pounds of a high-GWP refrigerant must maintain the following records for a minimum of 5 years. The records must be kept at the facility where the refrigeration system(s) is in operation and must be made available to an authorized representative of the Executive Officer, including a local Air Pollution Control Officer, upon request:
 - (1) All registration information required by section 95383.
 - (2) Documentation of all leak detection systems, leak inspections, and automatic leak detection system annual audit and calibrations required by section 95385.
 - (3) Records of all refrigeration system service and refrigerant leak repairs, and documentation of any conditions allowing repair of a refrigerant leak to be conducted more than 14 days after leak detection, as required pursuant to section 95386. Refrigeration system and refrigeration system service and refrigerant leak repair records must include documentation of all items reported pursuant to section 95388.
 - (4) Any retrofit or retirement plans required by section 95387.

- (5) All reports required by section 95388.
- (6) Any application for exemption submitted pursuant to subsection 95397 and any notification of an exemption approved, denied, revoked, or modified pursuant to subsection 95397.
- (6) (7) Invoices of all refrigerant purchases.
- (7) (8) Records of all shipments of refrigerants for reclamation or destruction, which must include the following information:
 - (A) Name and address of the person the high-GWP refrigerant was shipped to.
 - (B) Weight in pounds of high-GWP refrigerant shipped.
 - (C) Type of high-GWP refrigerant shipped.
 - (D) Date of shipment.
 - (E) Purpose of shipment (e.g. reclamation, destruction, etc.).
- (8) (9) Records of all refrigeration systems component data, measurements, calculations and assumptions used to determine the full charge.

§95390. Required Service Practices for <u>Stationary</u> High-GWP Appliances.

- (a) Required Service Practices. A person performing any installation, maintenance, service, repair, or disposal of an <u>stationary</u> appliance that could reasonably be expected to release refrigerant from the appliance into the environment must satisfy all of the following requirements:
 - (1) In preparing an appliance for recycling or disposal, the person must not intentionally disrupt the refrigerant circuit of the appliance resulting in a discharge of refrigerant into the atmosphere, unless an attempt to recover

the refrigerant is made using certified refrigerant recovery or recycling equipment; and

- (2) The person must make a recovery attempt using certified refrigerant recovery or recycling equipment for that type of appliance before opening the appliance to atmospheric conditions. Attempts to recover refrigerant must be made even if the person believes that all refrigerant has been removed or has previously leaked from the appliance. Refrigerant may be returned to the appliance from which it is recovered or to another appliance owned by the same person without being recycled or reclaimed; and
- (3) The person must not add any additional refrigerant to a refrigeration or air-conditioning appliance during manufacture or service, unless such refrigerant: (A) consists wholly of a class I or class II substance, as identified by section 602 of the federal Clean Air Act; or (B) is an alternative that has been found acceptable, under the Significant New Alternatives Policy (SNAP) program pursuant to section 612 of the federal Clean Air Act, for the specific refrigeration or air-conditioning end-use in which it is being employed; or (C) has been approved by the Executive Officer for the specific refrigeration or air-conditioning end-use in which it is being employed; and
- (4) The person must not add an additional refrigerant charge to any appliance known to have a refrigerant leak, except that it is permissible to add an additional refrigerant charge for seasonal adjustment or an additional refrigerant charge required to maintain operations while preparing or conducting a leak repair pursuant to and in compliance with section 95386; and
- (5) The person must hold a current, valid, and applicable certificate issued in accordance with Title 40 of the Code of Federal Regulations, Part 82, §82.161; and

- (6) The person must employ procedures for which the certified refrigerant recovery or recycling equipment was approved by the U.S. EPA or Executive Officer; and
- (7) The person must use certified refrigerant recovery or recycling equipment as specified by the certified refrigerant recovery or recycling equipment manufacturer, unless the manufacturer's specifications conflict with the procedures approved by the U.S. EPA or the Executive Officer for the certified refrigerant recovery or recycling equipment; and
- (8) The person must evacuate refrigerant from a non-refillable cylinder to a vacuum of 15 inches of mercury, relative to standard atmospheric pressure of 29.9 inches of mercury, before to recycling or disposal; and
- (9) The person must satisfy job site evacuation of refrigerants during recycling, recovering, reclaiming, or disposing in accordance with Title 40 of the Code of Federal Regulations, Part 82, §82.156.

§95391. Prohibitions.

- (a) *Prohibitions*. On or after January 1, 2011, no person shall sell, supply, offer for sale, or distribute any high-GWP refrigerant for use as a refrigerant, unless for reclamation or destruction, in a container with a refrigerant capacity of two pounds or greater unless:
 - (1) The buyer is a certified technician pursuant to Title 40 of the Code of Federal Regulations, Part 82, §82.40 or §82.161; or
 - (2) The buyer is an authorized representative of a person employing at least one certified technician who is certified pursuant to Title 40 of the Code of Federal Regulations, Part 82, §82.40 or §82.161 and is in full compliance with Title 40 of the Code of Federal Regulations, Part 82, §82.166, and the

buyer has provided evidence that at least one technician is properly certified; or

- (3) The refrigerant is sold only for eventual resale to a certified technician, an employer of a certified technician, or a refrigeration or air-conditioning appliance manufacturer, or the refrigerant is being sent for reclamation; or
- (4) The refrigerant is contained in a refrigeration or air-conditioning appliance.
- (b) No person shall sell, supply, offer for sale, or distribute used refrigerant to any person for use as a refrigerant unless the used refrigerant has first been reclaimed by a certified reclaimer.
- (c) No person shall sell, supply, offer for sale, or distribute any refrigerant unless such refrigerant: (1) consists wholly of a class I or class II substance, as identified by Section 602 of the U.S. Clean Air Act; or (2) is an alternative that has been found acceptable, under the Significant New Alternatives Policy (SNAP) program pursuant to Section 612 of the U.S. Clean Air Act, for the specific refrigeration or air-conditioning end-use in which it is being employed; or (3) has been approved by the Executive Officer for the specific refrigeration or air-conditioning end-use in which it is being employed.
- (d) No person shall recycle or dispose of a non-refillable cylinder before the non-refillable cylinder has been evacuated to a vacuum of 15 inches of mercury, relative to standard atmospheric pressure of 29.9 inches of mercury.
- (e) No person shall distribute or sell certified refrigerant recovery or recycling equipment unless such equipment meets the levels of evacuation to be achieved by recovery or recycling equipment as specified in Title 40 of the Code of Federal Regulations, Part 82, §82.158.
- (f) No person shall refill a non-refillable cylinder or use it as a temporary receiver during service.

(g) No person shall repair or modify a non-refillable cylinder in any way that allows the non-refillable cylinder to be refilled.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§95392. Reporting Requirements for Refrigerant Distributors, Wholesalers, and Reclaimers.

- (a) Reporting Requirements for Refrigerant Distributors and Wholesalers. A refrigerant distributor or wholesaler that sells, supplies, or distributes any amount of a high-GWP refrigerant for any purpose other than sales to a refrigerant distributor or wholesaler for eventual resale, or to any person for reclamation or destruction must submit an annual report to the Executive Officer by March 1, 2012, for the 2011 calendar year. By March 1, 2013, and each calendar year thereafter, the refrigerant distributor or wholesaler must submit an annual report providing information for the previous calendar year. The annual report must cover all California facilities under the operational control of the refrigerant distributor or wholesaler, must provide statewide annual aggregated data for the previous calendar year, and must include the following information:
 - (1) Name of refrigerant distributor or wholesaler.
 - (2) Refrigerant distributor or wholesaler mailing address including an address, city, state, and zip code.
 - (3) Refrigerant distributor or wholesaler contact person.
 - (4) The phone number of the refrigerant distributor or wholesaler contact person.
 - (5) The e-mail address of the refrigerant distributor or wholesaler contact person.
 - (6) The total statewide annual aggregated weight in pounds of each type of high-GWP refrigerant that was purchased or received for the purpose of

subsequent resale or delivery for any purpose other than reclamation or destruction.

- (7) The total statewide annual aggregated weight in pounds of each type of high-GWP refrigerant that was sold or distributed, excluding all sales to a facility outside of California or to a refrigerant distributor or wholesaler for eventual resale.
- (8) The total statewide annual aggregated weight in pounds of high-GWP refrigerant that was shipped to a certified reclaimer.
- (9) Name of all refrigerant distributor or wholesaler facilities under the operational control of the refrigerant distributor or wholesaler.
- (10) Address of each refrigerant distributor or wholesaler facility under the operational control of the refrigerant distributor or wholesaler.
- (11) Contact person name, phone number, and e-mail address for each refrigerant distributor or wholesaler facility under the operational control of the refrigerant distributor or wholesaler.
- (b) Reporting Requirements for Certified Reclaimers. A certified reclaimer reclaiming any high-GWP refrigerant in California must submit an annual report to the Executive Officer by March 1, 2012, for the 2011 calendar year. By March 1, 2013, and each calendar year thereafter, the certified reclaimer must submit an annual report providing information for the previous calendar year. The annual report must cover all California facilities under the operational control of the certified reclaimer, must provide statewide annual aggregated data for the previous calendar year, and must include the following information:
 - (1) Name of the certified reclaimer.
 - (2) Mailing address of the certified reclaimer including a street address, city, state, and zip code.
 - (3) Certified reclaimer contact person.
 - (4) The phone number of the certified reclaimer contact person.

- (5) The e-mail address of the certified reclaimer contact person.
- (6) The total statewide annual aggregated weight in pounds of high-GWP refrigerant that was received by the certified reclaimer for reclamation or destruction.
- (7) The total statewide annual aggregated weight in pounds of each type of high-GWP refrigerant that was reclaimed in California.
- (8) The total statewide annual aggregated weight in pounds of high-GWP refrigerant that was shipped out of California for reclamation.
- (9) The total statewide annual aggregated weight in pounds of high-GWP refrigerant that was destroyed or shipped out of California for destruction.
- (10) Name of all certified reclaimer facilities under the operational control of the certified reclaimer.
- (11) Address of each certified reclaimer facility under the operational control of the certified reclaimer.
- (12) Contact person name, phone number, and e-mail address for each certified reclaimer facility under the operational control of the certified reclaimer.

§95393. Recordkeeping Requirements for Refrigerant Distributors, Wholesalers, and Reclaimers.

- (a) The following records must be kept by each refrigerant distributor or wholesaler and certified reclaimer for a minimum of five years. These records must be kept at the facility of each distributor or wholesaler, or certified reclaimer and must be made available to an authorized representative of the Executive Officer upon request:
 - (1) Annual reports submitted pursuant to section 95392.

- (2) Invoices of all high-GWP refrigerant received through sale or transfer and all high-GWP refrigerant distributed through sale or transfer. These invoices must indicate the name of the purchaser, the date of sale, and the quantity and the type of High-GWP refrigerant purchased, sold, or transferred.
- (b) A refrigerant distributor or wholesaler selling a high-GWP refrigerant to a purchaser that is an employer of a certified technician must obtain written documentation from the purchaser showing that the purchaser currently employs at least one certified technician. This documentation must be kept at the facility of the refrigerant distributor or wholesaler for a minimum of five years, and must be made available to an authorized representative of the Executive Officer upon request.

§95394. Confidentiality.

- (a) All of the information identified in section 95388(b)(3) is a public record and may not be claimed as confidential.
- (b) Except for the information identified in subsection (a) above, any person 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 a person submitting information must be based on the person'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.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§ 95395. Enforcement.

- (a) *Injunctions*. Any violation of this subarticle may be enjoined pursuant to the Health and Safety Code section 41513.
- (b) Each day or portion thereof that any leak inspection or leak repair is not completed after the date the leak inspection or leak repair is required to be completed, or each day or portion thereof that any registration, report, or plan required by this subarticle remains unsubmitted, is submitted late, or contains incomplete or inaccurate information, shall constitute a single, separate violation of this subarticle.
- (c) Failure to pay the full amount of any fee required by this subarticle shall constitute a single, separate violation of this subarticle for each day or portion thereof that the fee has not been paid after the date the fee is due.
- (d) Enforcement of this article may be carried out by authorized representatives of the Executive Officer including a local Air Pollution Control Officer.

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.

§95396. Equivalent Local Rules.

- (a) The requirements specified in sections 95383, 95384, 95385, 95386, 95387, 95388, and 95389 of this subarticle shall not be enforced within the geographical boundaries of any air district that adopts and enforces requirements that will achieve emission reductions from stationary refrigeration systems that are equivalent to or greater than those achieved pursuant to sections 95383, 95384, 95385, 95386, 95387, 95388, and 95389.
- (b) Subsection (a) shall not become effective unless the Executive officer issues an Executive Order containing written findings that the criteria of subsection (a) have been met. The Executive Order shall include such terms and conditions as are necessary to insure that these criteria continue to be met.

§95397. Approval of Exemptions.

- (a) Exemption Criteria. The owner or operator of facility with a refrigeration system may request the Executive Officer for an exemption from the requirements of section 95386 and section 95387. To request an exemption, the applicant must follow the application procedure specified in subsection 95397(b), and must demonstrate that the criteria for one or more of the three exemptions allowed by this section have been satisfied. Information submitted pursuant to this section shall be handled in accordance with the provision of section 95394. The Executive Officer may approve the following exemptions:
 - (1) Emissions Lifecycle Exemption. The Executive Officer may allow the continuation of a refrigerant leak for a specified time period of no longer than three years if the Executive Officer determines that the applicant has provided clear and convincing documentation that the refrigerant leak cannot be repaired and that allowing the refrigerant leak to continue will result in less combined direct and indirect emissions than replacing the leaking refrigeration system. The documentation must include information quantifying the lifecycle direct emissions and indirect emissions, including energy use, and must include a calculation of these emissions based on the average lifetime of the refrigeration system or facility. The applicant must also provide a mitigation plan that includes a list of proposed actions to minimize emissions. The plan must include an analysis of options to minimize usage, reduce leaks or venting, and recycle or destroy high-GWP refrigerant. Any exemption granted pursuant to this paragraph may be extended for one or more additional periods of up to three years if the Executive Officer determines that the demonstration made pursuant to this paragraph remains valid.

- (2) Economic Hardship Exemption. The Executive Officer may allow the continuation of a refrigerant leak for a specified time period of no longer than three years if the Executive Officer determines that the applicant has provided clear and convincing documentation that all of the following criteria are met:
 - (A) Compliance would result in extraordinary economic hardship, such as closure of the entire facility or a large portion of the facility, or loss of a large portion of the revenue from the facility; and
 - (B) The extraordinary hardship to the applicant would be without a corresponding benefit in reducing combined direct and indirect emissions; and
 - (C) (B) The applicant has prepared a compliance report that can be implemented and will achieve compliance as expeditiously as possible. The compliance report must reasonably detail when compliance will be achieved and the method by which compliance will be achieved.
 - (D) Any exemption granted pursuant to this paragraph may be extended for one or more additional periods of up to three years if the Executive Officer determines that the demonstration made pursuant to paragraph remains valid.
- (3) Natural Disaster Exemption. The Executive Officer may allow the continuation of a refrigerant leak for a specified time period of no longer than three years if the Executive Officer determines that the applicant has provided clear and convincing documentation that failure to satisfy the conditions set forth in this subarticle was due to a natural disaster such as an earthquake or flood, an act of war or an act by a public enemy, or a civil disorder or riot.
- (4) Any exemption granted pursuant to subsection 95397(a)(1), (a)(2), or (a)(3) may be extended for one or more additional periods of up to three

years if the Executive Officer determines that the demonstration made pursuant to 95397(a)(1), (a)(2), or (a)(3) remains valid.

(b) Application for Exemptions.

- (1) To apply for an exemption the applicant must submit a written application demonstrating that the criteria have been met for one or more of the three exemptions specified in subsection (a).
- (2) Within 30 days of receipt of the exemption application the Executive Officer shall determine whether the application is complete, and shall notify the applicant of this determination.
- (3) If the exemption application is determined to be incomplete, the Executive Officer shall notify the applicant and specify the specific information needed to make the application complete.
- (4) Within 90 days after an application is determined to be complete, the Executive Officer shall determine whether and under what conditions an exemption will be permitted. The applicant and the Executive Officer may mutually agree to a longer time period for reaching a decision. During the review period, the Executive Officer may request, and the applicant shall provide, such additional information that is reasonably necessary to the decision. The applicant may also on his or her own initiative submit additional supporting documentation before a decision has been reached. The Executive Officer shall notify the applicant of the decision in writing and shall specify such terms and conditions as are necessary to insure that emissions will be minimized, and that the criteria specified in subsection (a) will continue to be met. Such conditions may include, but are not limited to, a requirement that best management practices be followed or that the applicant must implement the mitigation plan submitted by the applicant or mitigation measures identified by the Executive Officer.

- (c) The exemption shall cease to be effective upon the failure of the person to whom the exemption was granted to comply with any term or condition of the exemption.
- (d) Revocation or Modification of An Exemption. If the Executive Officer determines that an exemption no longer meets the criteria specified in subsection (a) of this section, the Executive Officer may revoke or modify the exemption as necessary to insure that the exemption continues to meet the criteria.
- (e) Effect of Denial or Revocation of an Exemption. Except as provided below in subsections (e)(1) and (e)(2), if If an applicant for an exemption is denied, or an existing exemption is revoked, within 14 days of a notice of such denial or revocation the refrigerant leak must be repaired in accordance with section 95386, or within 30 days of a notice of such denial or revocation the owner or operator of the facility must prepare a retrofit or retirement plan in accordance with subsection 95387(a)(2). The plan must establish a schedule to retrofit or retire a leaking refrigeration system no later than six months after a notice of denial or revocation, and all work must be completed during this six-month period.
 - (1) The time requirements for refrigerant leak repair under subsection (b), (c), or (d) of section 95386 remain applicable and are not reduced if an exemption is denied, or an existing exemption is revoked.
 - (2) The time requirements for the preparation and implementation of a retrofit or retirement plan under subsection (a) of section 95387 remain applicable and are not reduced if an exemption is denied, or an existing exemption is revoked.

§95398. Severability.

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

NOTE: Authority cited: Health and Safety Code Sections 38501, 38510, 38560, 38562, 38563, 38580, 38597, 39600, 39601, and 41511. Reference: Health and Safety Code Sections 38501, 38505, 38510, 38560, 38562, 38563, 38597, 38580, 39600, 39601, and 41511.