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**Title 40 —Protection of Environment**  
**Chapter I —Environmental Protection Agency**  
**Subchapter C —Air Programs**

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## Appendix A to Part 84

### Regulated Substances

# PART 84—PHASEDOWN OF HYDROFLUOROCARBONS

**Authority:** Pub. L. 116-260, Division S, Sec. 103.

**Source:** 86 FR 55201, Oct. 5, 2021, unless otherwise noted.

## Subpart A—Production and Consumption Controls

### § 84.1 Purpose and scope.

- (a) The purpose of the regulations in this subpart is to implement certain provisions of the American Innovation and Manufacturing Act of 2020 (AIM Act), enacted as part of Public Law 116-260. In particular, the AIM Act imposes limits on the production and consumption of certain regulated substances, according to a specified schedule, which are addressed by this subpart.
- (b) This subpart applies to any person that produces, transforms, destroys, imports, exports, sells or distributes, offers for sale or distribution, recycles for fire suppression, or reclaims a regulated substance and to end users in the six applications listed in subsection (e)(4)(B)(iv) of the AIM Act.

[86 FR 55206, Oct. 5, 2021]

### § 84.3 Definitions.

As used in this subpart, the term:

**Administrator** means the Administrator of the United States Environmental Protection Agency or his or her authorized representative.

**Allowance** means a limited authorization for the production or consumption of a regulated substance established under subsection (e) of section 103 in Division S, Innovation for the Environment, of the Consolidated Appropriations Act, 2021 (Pub. L. 116-260) (the AIM Act). An allowance allocated under subsection (e) of section 103 in Division S of the AIM Act does not constitute a property right.

**Application-specific allowance** means a limited authorization granted in accordance with subsection (e)(4)(B)(iv) of the AIM Act for the production or import of a regulated substance for use in the specifically identified applications that are listed in that subsection and in accordance with the restrictions contained at § 84.5(c). An application-specific allowance does not constitute a property right.

**Batch** means a vessel, container, or cylinder from which a producer, importer, reclaimer, recycler, or repackager transfers regulated substances directly for sale or distribution, or for repackaging for sale or distribution; or a population of small vessels, containers, or cylinders with the same nominal composition that a producer, importer, reclaimer, recycler, or repackager directly offers for sale or distribution.

**Berth** means to moor a ship in its allotted place at a wharf or dock.

**Bulk** means a regulated substance of any amount that is in a container for the transportation or storage of that substance such as cylinders, drums, ISO tanks, and small cans. A regulated substance that must first be transferred from a container to another container, vessel, or piece of equipment in order to realize its intended use is a bulk substance. A regulated substance contained in a manufactured product such as an appliance, an aerosol can, or a foam is not a bulk substance.

**Certificate of analysis** means a document that certifies the contents of an import meets the nominal composition following sampling and testing requirements prescribed in § 84.5(i)(3) for the appropriate regulated substance or blend of regulated substances.

**Chemical vapor deposition chamber cleaning** means, in the context of semiconductor manufacturing, a process type in which chambers used for depositing thin films are cleaned periodically using plasma-generated fluorine atoms and other reactive fluorine-containing fragments.

**Commonly owned:** An entity that is related to another entity by a shared individual natural person(s), where either:

- (1) There is at least a single individual that owns 30 percent or more of each entity; or
- (2) Individuals that share a direct family relationship (parent, child, sibling, or spouse) own a majority of each entity.

**Confer** means to shift unexpended application-specific allowances obtained in accordance with subsection (e)(4)(B)(iv) of the AIM Act from the end user allocated such allowances to one or more entities in the supply chain for the production or import of a regulated substance for use by the end user.

**Consumption**, with respect to a regulated substance, means production plus imports minus exports.

**Consumption allowances** means a limited authorization to produce and import regulated substances; however, consumption allowances may be used to produce regulated substances only in conjunction with production allowances. A person's consumption allowances are the total of the allowances obtained under § 84.11 or § 84.15 as may be modified under §§ 84.17 (availability of additional consumption allowances), 84.19 (transfer of allowances), and 84.35 (administrative consequences).

**Defense spray** means an aerosol-based spray used for self-defense, including pepper spray and animal sprays, and containing the irritant capsaicin and related capsaicinoids (derived from oleoresin capsicum), an emulsifier, and an aerosol propellant.

**Destruction** means the expiration of a regulated substance to the destruction and removal efficiency actually achieved. Such destruction might result in a commercially useful end product, but such usefulness would be secondary to the act of destruction.

**Etching** means, in the context of semiconductor manufacturing, a process type that uses plasma-generated fluorine atoms and other reactive fluorine-containing fragments that chemically react with exposed thin films (e.g., dielectric, metals) or substrate (e.g., silicon) to selectively remove portions of material. This includes semiconductor production processes using fluorinated GHG reagents to clean wafers.

**Exchange value** means the value assigned to a regulated substance in accordance with AIM Act subsections (c) and (e), as applicable, and as provided in appendix A to this part.

**Exchange value equivalent (EVe)** means the exchange value-weighted amount of a regulated substance obtained by multiplying the mass of a regulated substance by the exchange value of that substance.

**Expend** means to subtract the number of allowances required for the production or import of regulated substances under this part from a person's unexpended allowances.

**Export** means the transport from inside the United States or its territories to persons outside the United States or its territories, excluding United States military bases and ships for onboard use.

**Exporter** means the person who contracts to sell regulated substances for export or transfers regulated substances to his affiliate in another country.

**Facility** means one or more production lines at the same location owned by or under common control of the same person.

**Final customer** means the last person to purchase a bulk regulated substance before its intended use. Final customer includes, but is not limited to, air conditioning contractors in the residential air conditioning market, foam systems houses, aerosol fillers, semiconductor manufacturers, air conditioning and refrigeration equipment manufacturers that ship equipment pre-charged, and fire extinguisher manufacturers.

**Fire suppressant recycler** means, generally, an entity that collects used HFC fire suppressants and directly resells those collected and aggregated HFCs—with or without any additional reprocessing—to another entity for reuse as a fire suppressant (also referred to as a “recycler for fire suppression” in this subpart). An entity that collects and aggregates used HFC fire suppressants for distribution to another entity for reprocessing before being sold for reuse as a fire suppressant would not be a fire suppressant recycler. An entity that resells HFC fire suppressants that have already been reprocessed for use as a fire suppressant by another entity would not be a fire suppressant recycler.

**Foreign country** means an entity that is recognized as a sovereign nation or country other than the United States of America.

**Heel** means the amount of a regulated substance that remains in a container after the container is discharged or offloaded (that is no more than 10 percent of the volume of the container).

**Import** means to land on, bring into, or introduce into, or attempt to land on, bring into, or introduce into, any place subject to the jurisdiction of the United States, regardless of whether that landing, bringing, or introduction constitutes an importation within the meaning of the customs laws of the United States. Offloading used regulated substances recovered from equipment aboard a marine vessel, aircraft, or other aerospace vehicle during servicing is not considered an import.

**Importer** means any person who imports a regulated substance into the United States. “Importer” includes the person primarily liable for the payment of any duties on the merchandise or an authorized agent acting on his or her behalf. The term also includes:

- (1) The consignee;
- (2) The importer of record;
- (3) The actual owner; or
- (4) The transferee, if the right to draw merchandise in a bonded warehouse has been transferred.

**Individual shipment** means the kilograms of a regulated substance for which a person may make one

- (1) U.S. Customs entry, as identified in the non-objection notice obtained from the relevant Agency official in accordance with § 84.25.

**Laboratory testing** means the use of the sampling and testing methodology prescribed in § 84.5(i)(3) by a laboratory that is accredited to ISO 17025 in accordance with ISO/IEC 17025:2017(E) (incorporated by reference, see § 84.37), or certified under the AHRI Refrigerant Testing Laboratory Certification Program in accordance with the AHRI RTL OM and AHRI General OM (both incorporated by reference, see § 84.37), or recognized under OSHA's Nationally Recognized Testing Laboratory program in accordance with requirements codified at 29 CFR 1910.7.

**Majority owned** means when a corporate entity has at least a fifty percent stake in another entity.

**Metered dose inhaler (MDI)** means a handheld pressurized inhalation system that delivers small, precisely measured therapeutic doses of medication directly to the airways of a patient. MDIs treat health conditions such as asthma and chronic obstructive pulmonary disease and are approved for such use by the U.S. Food and Drug Administration (FDA).

**Mission-critical military end uses** means those uses of regulated substances by an agency of the Federal Government responsible for national defense that have a direct impact on mission capability, as determined by the U.S. Department of Defense, including, but not limited to uses necessary for development, testing, production, training, operation, and maintenance of Armed Forces vessels, aircraft, space systems, ground vehicles, amphibious vehicles, deployable/expeditionary support equipment, munitions, and command and control systems.

**Non-objection notice** means the limited authorization granted by the relevant Agency official to import a specific individual shipment of a regulated substance in accordance with § 84.25.

**On board aerospace fire suppression** means use of a regulated substance in fire suppression equipment used on board commercial and general aviation aircraft, including commercial-derivative aircraft for military use; rotorcraft; and space vehicles. On board commercial aviation fire suppression systems are installed throughout mainline and regional passenger and freighter aircraft, including engine nacelles, auxiliary power units (APUs), lavatory trash receptacles, baggage/crew compartments, and handheld extinguishers.

**Person** means any individual or legal entity, including an individual, corporation, partnership, association, state, municipality, political subdivision of a state, Indian tribe; any agency, department, or instrumentality of the United States; and any officer, agent, or employee thereof.

**Process agent** means the use of a regulated substance to form the environment for a chemical reaction or inhibiting an unintended chemical reaction (e.g., use as a solvent, catalyst, or stabilizer) where the regulated substance is not consumed in the reaction, but is removed or recycled back into the process and where no more than trace quantities remain in the final product. A feedstock, in contrast, is consumed during the reaction.

**Production/Produce** means the manufacture of a regulated substance from a raw material or feedstock chemical (but not including the destruction of a regulated substance by a technology approved by the Administrator as provided in § 84.29). The term production does not include:

- (1) The manufacture of a regulated substance that is used and entirely consumed (except for trace quantities) in the manufacture of another chemical;

- (2) The reclamation, reuse, or recycling of a regulated substance; or
- (3) Insignificant quantities of a regulated substance inadvertently or coincidentally generated from any of the following, independent circumstances: during a chemical manufacturing process, resulting from unreacted feedstock, from the listed substance's use as a process agent present as a trace quantity in the chemical substance being manufactured, as an unintended byproduct of research and development applications, or during semiconductor manufacturing processes.

**Production allowances** means the limited authorization to produce regulated substances; however, production allowances may be used to produce regulated substances only in conjunction with consumption allowances. A person's production allowances are the total of the allowances obtained under § 84.9 or § 84.15 as may be modified under §§ 84.19 (transfer of allowances) and 84.35 (administrative consequences).

**Production line** means any process equipment (e.g., reactor, distillation column) used to convert raw materials or feedstock chemicals into regulated substances or consume regulated substances in the production of other chemicals.

**Reclaim** means the reprocessing of regulated substances to all of the specifications in appendix A to 40 CFR part 82, subpart F (based on AHRI Standard 700-2016) that are applicable to that regulated substance and to verify that the regulated substance meets these specifications using the analytical methodology prescribed in section 5 of appendix A to 40 CFR part 82, subpart F.

**Regulated substance** means a hydrofluorocarbon listed in the table contained in subsection (c)(1) of the AIM Act and a substance included as a regulated substance by the Administrator under the authority granted in subsection (c)(3). A current list of regulated substances can be found in appendix A to this part.

**Repackagers** means entities who transfer regulated substances, either alone or in a blend, from one container to another container prior to sale or distribution or offer for sale or distribution. An entity that services system cylinders for use in fire suppression equipment and returns the same regulated substances to the same system cylinder it was recovered from after the system cylinder is serviced is not a repackager.

**Representative sample** means a sample collected from a container offered for sale or distribution using a sampling method that obtains all components of regulated substance(s) in an unbiased and precise manner; and a sample that can be used to infer that the composition of regulated substance(s) in a population of containers offered for sale or distribution that constitute, or are derived from, the batch, are within stated tolerances.

**Space vehicle** means a man-made device, either manned or unmanned, designed for operation beyond Earth's atmosphere. This definition includes integral equipment such as models, mock-ups, prototypes, molds, jigs, tooling, hardware jackets, and test coupons. Also included is auxiliary equipment associated with tests, transport, and storage, which through contamination can compromise the space vehicle performance.

**Structural composite preformed polyurethane foam** means a foam blown from polyurethane that is reinforced with fibers and with polymer resin during the blowing process, and is preformed into the required shape (e.g., specific boat or trailer design) to increase structural strength while reducing the weight of such structures.

**Transform** means to use and entirely consume (except for trace quantities) a controlled substance in the manufacture of other chemicals. A regulated substance that is used and entirely consumed (except for trace quantities) in the manufacture of another chemical is called a feedstock.

**Transshipment** means the continuous shipment of a regulated substance, from a foreign country of origin through the United States or its territories, to a second foreign country of final destination, as long as the shipment does not enter U.S. commerce. A transshipment, as it moves through the United States or its territories, cannot be repackaged, sorted, or otherwise changed in condition.

**Used regulated substances** means regulated substances that have been recovered from their intended use systems (including regulated substances that have been, or may be subsequently, recycled or reclaimed).

[86 FR 55201, 55206, Oct. 5, 2021, as amended at 88 FR 46893, July 20, 2023; 88 FR 46894, July 20, 2023]

## § 84.5 Prohibitions relating to regulated substances.

### (a) **Production.**

- (1) As of January 1, 2022, no person may produce regulated substances, intentionally or unintentionally, in excess of the quantity of unexpended production allowances and consumption allowances or unexpended application-specific allowances held by that person under the authority of this subpart at that time in that control period. Every kilogram of production in excess of allowances expended constitutes a separate violation of this subpart. The required amount of allowances that must be expended will be calculated to the tenth with a minimum expenditure of 0.1 allowances for any production of regulated substances.
- (2) As of January 1, 2022, no person may expend production allowances to produce a quantity of regulated substances unless that person expends an equal quantity of consumption allowances at the same time.
- (3) A person is not required to expend production, consumption, or application-specific allowances to produce regulated substances if the regulated substances are destroyed using a technology approved by the Administrator for destruction under § 84.29 within 30 days of generating the regulated substance if the destruction technology is located at the facility where production occurred or 120 days of generating the regulated substance if the destruction technology is not located at the facility where production occurred.
- (4) No person may expend production or consumption allowances for generation of HFC-23 that is emitted at the same facility as where it is produced. Consistent with this prohibition, prior to the emissions standard compliance date established in § 84.27, neither production nor consumption allowances are required for HFC-23 emitted at the same facility as where it is produced.

### (b) **Import.** This paragraph applies starting January 1, 2022.

- (1) No person may import bulk regulated substances, either as a single component or a multicomponent substance, except:
  - (i) If the importer of record possesses at the time they are required to submit reports to EPA pursuant to § 84.31(c)(7), and expends at the time of ship berthing for vessel arrivals, border crossing for land arrivals such as trucks, rails, and autos, and first point of terminus in U.S. jurisdiction for arrivals via air, consumption or application-specific allowances in a quantity equal to the exchange-value weighted equivalent of the regulated substances imported, whether present as a single component or a multicomponent blend. The required amount of allowances must be calculated to the tenth, but a minimum expenditure of 0.1 allowances is required for any import of regulated substances;



- (ii) After receipt of a non-objection notice for substances for use in a process resulting in their transformation or their destruction in accordance with § 84.25(a);
  - (iii) After receipt of a non-objection notice for used regulated substances imported for destruction in accordance with § 84.25(b);
  - (iv) As a transshipment in accordance with § 84.31(c)(3) if all transhipped regulated substance is exported from the United States within six months of its import; or
  - (v) All imports pursuant to paragraph (b)(1)(i) or (ii) of this section must be physically accompanied by a certificate of analysis, if the certificate of analysis has not been electronically submitted pursuant to § 84.31(c)(7)(xvi).
- (2) No person may attempt to land bulk regulated substances on, bring regulated substances into, or introduce regulated substances into, any place subject to the jurisdiction of the United States without meeting one of the categories set forth in § 84.5(b)(1).
  - (3) Each person meeting the definition of importer for a particular regulated substance import transaction is jointly and severally liable for a violation of paragraph (b)(1) of this section, unless they can demonstrate that the importer of record possessed and expended allowances in accordance with the requirement outlined in paragraph (b)(1)(i) or (v) of this section or another party who meets the definition of an importer met one of the exceptions set forth in paragraphs (b)(1)(ii) through (iv) of this section.
  - (4) Imports authorized under paragraph (b)(1)(ii) of this section may not be in containers designed to hold 100 pounds or less of a regulated substance.
  - (5) A person issued a non-objection notice for the import of an individual shipment of regulated substances under paragraph (b)(1)(ii) or (iii) of this section may not transfer or confer the right to import.
  - (6) No person may introduce into U.S. commerce any regulated substance claimed as a transshipment.
  - (7) Every kilogram of bulk regulated substances imported contrary to this paragraph (b) constitutes a separate violation of this subpart. Import of less than one kilogram of bulk regulated substance contrary to this paragraph (b) constitutes a separate violation of this subpart.

(c) **Application-specific uses.**

- (1) As of January 1, 2022, no person may confer application-specific allowances for the production or import of a regulated substance in excess of the amount of unexpended application-specific allowances held by that person under the authority of this subpart at that time in that control period. No person may expend an application-specific allowance for regulated substances to be used in any application other than the one identified by the application-specific allowance expended. Every kilogram of production or import in excess of the application-specific allowances expended by the producer or importer constitutes a separate violation of this subpart. Production or import of less than one kilogram of regulated substance in excess of the application-specific allowances expended by the producer or importer constitutes a separate violation of this subpart.

- (2) No person may use a regulated substance produced or imported by expending application-specific allowances for any purpose other than those for which the application-specific allowance was allocated, and as set forth in this paragraph (c). Application-specific allowances are apportioned to a person under §§ 84.13 and 84.15 for the production or import of regulated substances solely for the individual application listed on the allowance, which may include:
  - (i) A propellant in metered dose inhalers;
  - (ii) Defense sprays;
  - (iii) Structural composite preformed polyurethane foam for marine use and trailer use;
  - (iv) The etching of semiconductor material or wafers and the cleaning of chemical vapor deposition chambers within the semiconductor manufacturing sector;
  - (v) Mission-critical military end uses, such as armored vehicle engine and shipboard fire suppression systems and systems used in deployable and expeditionary applications; and
  - (vi) On board aerospace fire suppression.
- (3) This provision applies starting January 1, 2022.
  - (i) No person may acquire application-specific allowances unless for use in the same application as associated with the application-specific allowance. No person may transfer or confer application-specific allowances unless for use in the same application as associated with the application-specific allowance.
  - (ii) No person may acquire or sell regulated substances produced or imported using application-specific allowances for use in anything other than the application for which it was originally allocated. Every kilogram of a regulated substance imported or exported in contravention of this paragraph constitutes a separate violation of this subpart. Import or export of less than one kilogram of regulated substance in contravention of this paragraph constitutes a separate violation of this subpart.
- (d) **Calendar-year allowances.** All production, consumption, and application-specific allowances may only be expended for production or import occurring in the calendar year for which the allowances are allocated (i.e., January 1 through December 31). No person may expend, transfer, or confer a production, consumption, or application-specific allowance after December 31 of the year for which it was issued. Entities may transfer or confer their production, consumption, or application-specific allowances before January 1 of the calendar year for which the allowances were allocated.
- (e) **International transfers.** This paragraph applies starting January 1, 2022.
  - (1) No person subject to the requirements of this subpart may transfer a production allowance to a person in a foreign country unless that country has established the same or similar requirements or otherwise undertaken commitments regarding the production and consumption of regulated substances as are contained in the AIM Act, as determined by the relevant agency official.
  - (2) No person may transfer production allowances to or from a person in a foreign country without satisfying the requirements in § 84.19. Every production allowance transferred in contravention of this paragraph constitutes a separate violation of this subpart.

- (f) ***Sale and distribution.*** No person may sell or distribute, or offer for sale or distribution, any regulated substance that was produced or imported in violation of paragraphs (a) through (d) of this section, except for such actions needed to re-export the regulated substance. Every kilogram of a regulated substance sold or distributed, or offered for sale or distribution, in contravention of this paragraph constitutes a separate violation of this subpart. Sale or distribution, or offer for sale or distribution, of less than one kilogram of regulated substance in contravention of this paragraph constitutes a separate violation of this subpart.
- (g) ***False information.*** No person may provide false, inaccurate, or misleading information to the EPA when petitioning, reporting, or for any communication required under this subpart.
- (h) [Reserved]
- (i) ***Labeling.***
  - (1) As of January 1, 2022, no person may sell or distribute, offer for sale or distribution, or import containers containing a regulated substance that lacks a label or other permanent markings stating the common name(s), chemical name(s), or ASHRAE designation of the regulated substance(s) or blend contained within, and the percentages of the regulated substances if a blend. The label or other permanent markings must be:
    - (i) Durable and printed or otherwise labeled on, or affixed to, the external surface of the bulk regulated substance container;
    - (ii) Readily visible and legible;
    - (iii) Able to withstand open weather exposure without a substantial reduction in visibility or legibility;
    - (iv) Displayed on a background of contrasting color; and
    - (v) If a container of a regulated substance is contained within a box or other overpack, the exterior packaging must contain legible and visible information of what regulated substance is contained within.
  - (2) No person other than the importer of record may repackage or relabel regulated substances that were initially unlabeled or mislabeled. In order to repackage the regulated substances, the importer of record must either:
    - (i) Expend consumption allowances equal to the amount of allowances that would be required if each cylinder were full of HFC-23; or
    - (ii) Verify the contents with independent laboratory testing results and affix a correct label on the container that matches the lab-verified test results before the date of importation (consistent with the definition at 19 CFR 101.1) of the container.
  - (3)
    - (i) No person producing, importing, exporting, reclaiming, recycling for fire suppression, or repackaging regulated substances, whether as a single or multicomponent substance, may sell or distribute, or offer for sale or distribution, those regulated substances without first conducting laboratory testing of a representative sample of the regulated substances that they are producing, importing, exporting, reclaiming, recycling for fire suppression, or repackaging to verify that the composition of the regulated substance(s) matches the container labeling using

the sampling and testing methodology prescribed in appendix A to 40 CFR part 82, subpart F for regulated substances offered for sale and distribution as refrigerants and using the following sampling and testing method for regulated substances offered for non-refrigerant uses:

**TABLE 1 TO PARAGRAPH (i)(3)(i) NON-REFRIGERANT REGULATED SUBSTANCE  
SAMPLING AND TESTING METHODS**

Regulated substance	Sampling and testing method
HFC-23, HFC-134, HFC-125, HFC-143a, HFC-41, HFC-152a	Appendix A to 40 CFR part 82, subpart F, Sections 1, 2, 3, 5.1, 5.2, 5.3, 7, 8; <i>Part 7 of 2008 Appendix C for Analytical Procedures for AHRI Standard 700-2014—Normative</i> , (incorporated by reference in § 84.37). <sup>3</sup>
HFC-134a, HFC-143, HFC-245fa, HFC-32, HFC-152	Appendix A to 40 CFR part 82, subpart F, Sections 1, 2, 3, 5.1, 5.2, 5.3, 7, 8; <i>Part 9 of 2008 Appendix C for Analytical Procedures for AHRI Standard 700-2014—Normative</i> , (incorporated by reference in § 84.37). <sup>3</sup>
HFC-227ea, HFC-236cb, HFC-236ea, HFC-236fa, HFC-245ca, HFC-365mfc, HFC-43-10mee	Sections 8, <sup>1</sup> 9, 10, 11, 12, <sup>2</sup> and 13 of EPA Method 18 as applicable—appendix A-6 to 40 CFR part 60—Test Methods 16 through 18. Or ASTM D6806-02 (2022), <i>Standard Practice for Analysis of Halogenated Organic Solvents and Their Admixtures by Gas Chromatography</i> (incorporated by reference in § 84.37). <sup>4</sup>

<sup>1</sup> Only applicable portions of section 8 as specified here are required. Canisters may be used in place of bags for the purposes of these requirements. A sampling and analysis procedure under section 8.2 which provides for a representative sample is required (while section 8.2.1.5 is likely most appropriate, other procedures may be acceptable). Sections 8.4.1, 8.4.2.1, and 8.4.2.2 are required.

<sup>2</sup> “Dry basis” concentrations do not need to be recorded.

<sup>3</sup> ASTM D6064-11 (reapproved 2022), *Standard Specification for HFC-227ea, 1,1,1,2,3,3,3-Heptafluoropropane (CF<sub>3</sub>CHFCF<sub>3</sub>)* (incorporated by reference in § 84.37) may be used as an alternative for non-refrigerant regulated substances offered for fire suppression use.

<sup>4</sup> ASTM D6231/D6231M-21, *Standard Specification for HFC-125 (Pentafluoroethane, C<sub>2</sub>H<sub>5</sub>F<sub>5</sub>)* (incorporated by reference in § 84.37) and ASTM D6541-21 *Standard Specification for HFC-236fa, 1,1,1,3,3,3-Hexafluoropropane, (CF<sub>3</sub>CH<sub>2</sub>CF<sub>3</sub>)*, (incorporated by reference in § 84.37) reference ASTM D6806 and may be used as an alternative for non-refrigerant regulated substances offered for fire suppression use.

- (ii) No person may sell or distribute, or offer for sale or distribution, regulated substances, whether as a single or multicomponent substance, as a refrigerant (except if recovered from and recycled for use in motor vehicle air conditioning or motor vehicle air conditioning-like appliances in accordance with 40 CFR part 82, subpart B) that do not meet the specifications in appendix A to 40 CFR part 82, subpart F—Specifications for Refrigerants, or, if not listed therein, appendix A1 to 40 CFR part 82, subpart F. For persons who are producing, importing,

reclaiming, recycling for fire suppression, or repackaging regulated substances, the applicable specifications must be verified using laboratory testing and the sampling and testing methodology prescribed in appendix A to 40 CFR part 82, subpart F.

- (j) **Relationship to other laws.** Section (k) of the AIM Act states that sections 113, 114, 304, and 307 of the Clean Air Act (42 U.S.C. 7413, 7414, 7604, 7607) shall apply to this section and any rule, rulemaking, or regulation promulgated by the Administrator pursuant to this section as though this section were expressly included in title VI of that Act (42 U.S.C. 7671 *et seq.*). Violation of this part is subject to Federal enforcement and the penalties laid out in section 113 of the Clean Air Act.

[86 FR 55206, Oct. 5, 2021, as amended at 88 FR 46894, July 20, 2023; 89 FR 73592, Sept. 11, 2024]

§ 84.7 Phasedown schedule.

- (a) **Phasedown from baseline.** Total production and consumption of regulated substances in the United States in each year cannot exceed the amounts (shown as a percentage of baseline) in the following table:

Date	Percentage of production baseline (percent)	Percentage of consumption baseline (percent)
(1) 2022-2023	90	90
(2) 2024-2028	60	60
(3) 2029-2033	30	30
(4) 2034-2035	20	20
(5) 2036 and thereafter	15	15

- (b) **Annual production and consumption limits.**
- (1) The production baseline for regulated substances is 382,535,439 metric tons of exchange value equivalent.

(2) The consumption baseline for regulated substances is 302,538,316 metric tons of exchange value equivalent.

- (3) Total production and consumption in metric tons of exchange value equivalent for regulated substances in the United States in each year is derived by multiplying the production baseline or consumption baseline by the percentage in paragraph (a) of this section. Total production and consumption allowances issued under this subpart may not exceed the quantities shown in the following table:

**TABLE 2 TO PARAGRAPH (b)(3)**

Year	Total production (MTEVe)	Total consumption (MTEVe)
(i) 2022-2023	344,299,157	273,498,315
(ii) 2024-2028	229,521,263	181,522,990
(iii) 2029-2033	114,760,632	90,761,495
(iv) 2034-2035	76,507,088	60,507,663
(v) 2036 and thereafter	57,380,316	45,380,747

[86 FR 55201, Oct. 5, 2021, as amended at 88 FR 44225, July 12, 2023; 88 FR 46895, July 20, 2023]

#### **§ 84.9 Allocation of calendar-year production allowances.**

- (a) The relevant agency official will issue, through a separate notification, calendar year 2022 and 2023 production allowances to entities that produced a regulated substance in 2020. The number of production allowances allocated to each eligible entity for 2022-2023 is calculated as follows:
- (1) Take the average of the three highest annual exchange value-weighted production amounts that each eligible entity reported to the agency for calendar years 2011 through 2019;
  - (2) Sum the “average high year” values determined in step 1 of all eligible entities and determine each entity's percentage of that total;
  - (3) Determine the amount of general pool production allowances by subtracting the quantity of application-specific allowances for that year as determined in accordance with § 84.13 and the set-aside in § 84.15 from the production cap in § 84.7(b)(3);
  - (4) Determine individual entities' production allowance quantities by multiplying each entity's percentage determined in step 2 by the amount of general pool allowances determined in step 3.
- (b) Starting with the allocation of 2024 calendar years allowances, the relevant Agency official will issue, through a separate notification, calendar year production allowances to entities that produced a regulated substance in 2021 or 2022, or both 2021 and 2022. The allocation of calendar years 2024, 2025, 2026, 2027, and 2028 production allowances is calculated as follows for each entity:

- (1) Take the average of the three highest annual exchange value-weighted production amounts that each eligible entity reported to the Agency for calendar years 2011 through 2019. If an entity, or commonly owned or controlled group of entities, does not have consumption amounts for three years between calendar years 2011 through 2019, the relevant Agency official will take the average of available year(s) of consumption for calendar years 2011 through 2019;
- (2) Sum every entity's average values determined in paragraph (b)(1) of this section and determine each entity's percentage of that total;
- (3) Determine the amount of general pool production allowances by subtracting the quantity of application-specific allowances for that year as determined in accordance with § 84.13 from the production cap in § 84.7(b)(3); and
- (4) Determine individual entities' production allowance quantities by multiplying each entity's percentage determined in paragraph (b)(2) of this section by the amount of general pool allowances determined in paragraph (b)(3) of this section.

(c)

- (1) EPA will allocate calendar year production allowances to individual entities by October 1 of the calendar year prior to the year in which the allowances may be used based on the exchange value-weighted quantities calculated in paragraph (a)(4) of this section.
- (2) EPA will provide public notice of the list of companies receiving production allowances as well as the quantities they will be allocated by that date.
- (3) In addition to the procedure in paragraph (a) of this section, the relevant agency official will allocate calendar year production allowances to entities that qualified for allowances under § 84.15.
- (4) If there are remaining production allowances after distribution from the set-aside under § 84.15, the relevant agency official will distribute such allowances on a pro rata basis to the entities in paragraph (a) of this section by March 31 of the calendar year in which the allowances may be used.

[86 FR 55201, Oct. 5, 2021, as amended at 88 FR 46895, July 20, 2023]

### **§ 84.11 Allocation of calendar-year consumption allowances.**

- (a) The relevant agency official will issue, through a separate notification, calendar years 2022 and 2023 consumption allowances to entities that imported or produced a bulk regulated substance in 2020, unless an individual accommodation is permitted by a relevant Agency official. If multiple entities that imported are related through shared corporate or common ownership or control, the relevant agency official will calculate and issue allowances to a single corporate or common owner. The number of consumption allowances allocated to each eligible entity for 2022-2023 is calculated as follows:
  - (1) Take the average of the three highest annual exchange value-weighted consumption amounts chosen at the corporate or common ownership level for eligible entities reporting to the agency for each calendar year 2011 through 2019;
  - (2) Sum the "average high year" values determined in step 1 of all eligible entities and determine each entity's percentage of that total;

- (3) Determine the amount of general pool consumption allowances by subtracting the quantity of application-specific allowances for that year as determined in accordance with § 84.13 and the set-aside in § 84.15 from the consumption cap § 84.7(b)(3);
  - (4) Determine individual entity consumption allowance quantities by multiplying each entity's percentage determined in step 2 by the amount of general pool allowances determined in step 3.
- (b) Starting with the allocation of 2024 calendar years allowances the relevant Agency official will issue, through a separate notification, calendar year consumption allowances. The allocation of calendar year 2024, 2025, 2026, 2027, and 2028 consumption allowances is calculated as follows for each entity:
- (1) For new market entrants that were allocated allowances pursuant to § 84.15(e)(3), take the allowances allocated for calendar year 2023 and divide that value by the proportion of calendar year 2023 consumption allowances received by general pool allowance holders pursuant to paragraph (a) of this section relative to their high three average calculated pursuant to paragraph (a)(2) of this section;
  - (2) For entities that produced or imported a regulated substance in 2021 or 2022, or both 2021 and 2022, and have not been allocated allowances pursuant to § 84.15(e)(3), the relevant Agency official will calculate and issue allowances. This calculation and issuance will be to a single entity if multiple entities with historic consumption data are related through shared corporate or common ownership. The relevant Agency official will take the average of the three highest annual exchange value-weighted consumption amounts, which for entities related through shared corporate or common ownership or control would be aggregated and averaged at the corporate or common ownership level, that each eligible entity reported to the Agency for calendar years 2011 through 2019. If an entity, or commonly owned or controlled group of entities, does not have consumption amounts for three years between calendar years 2011 through 2019, the relevant Agency official will take the average of available year(s) of consumption for calendar years 2011 through 2019;
  - (3) If an entity has a value calculated under paragraphs (b)(1) and (b)(2) of this section, take the single higher value;
  - (4) If an entity allocated allowances pursuant to § 84.15(e)(3) was acquired by an entity that has a market share calculable under paragraph (b)(2) of this section, and EPA has approved this acquisition, sum the value calculated under paragraph (b)(1) of this section for the entity allocated allowances pursuant to § 84.15(e)(3) with the value calculated under paragraph (b)(2) of this section disregarding any historic consumption activity by the entity allocated allowances pursuant to § 84.15(e)(3), except this paragraph (b)(4) shall not apply to an entity allocated allowances pursuant to § 84.15(e)(3) that has a higher value calculated under paragraph (b)(2) of this section than under paragraph (b)(1) of this section;
  - (5) Sum every entity's values as determined in paragraphs (b)(1), (2), (3), and (4) of this section and determine each entity's percentage of that total;
  - (6) Determine the amount of general pool consumption allowances by subtracting the quantity of application-specific allowances for that year as determined in accordance with § 84.13 from the consumption cap in § 84.7(b)(3); and
  - (7) Determine individual entities' consumption allowance quantities by multiplying each entity's percentage determined in paragraph (b)(5) of this section by the amount of general pool allowances determined in paragraph (b)(6) of this section.



(c)

- (1) EPA will allocate calendar year consumption allowances to individual entities by October 1 of the calendar year prior to the year in which the allowances may be used based on the exchange value-weighted quantities calculated in paragraph (a)(4) of this section.
- (2) EPA will provide public notice of the list of companies receiving consumption allowances as well as how they will be allocated by that date.

[86 FR 55201, Oct. 5, 2021, as amended at 88 FR 46896, July 20, 2023]

### § 84.13 Allocation of application-specific allowances.

- (a) Application-specific allowances are available to entities for calendar years 2022, 2023, 2024, and 2025 that use a regulated substance in the following applications:
  - (1) As a propellant in metered dose inhalers;
  - (2) In the manufacture of defense sprays;
  - (3) In the manufacture of structural composite preformed polyurethane foam for marine use and trailer use;
  - (4) In the etching of semiconductor material or wafers and the cleaning of chemical vapor deposition chambers within the semiconductor manufacturing sector;
  - (5) For mission-critical military end uses; and
  - (6) For on board aerospace fire suppression.
- (b) Entities identified in paragraph (a) of this section must request application-specific allowances by July 31 of the calendar year prior to the year in which the allowances may be used starting with the calendar year 2023 allocation. The application must include the information required in § 84.31(h)(2) except for applications for mission-critical military end uses, which must include the information required in § 84.31(h)(3).
  - (1) Entities must provide additional information if requesting that EPA consider unique circumstances that are not reflected by the rates of growth calculated in paragraph (c)(1) of this section. The relevant agency official will consider the following situations as unique circumstances:
    - (i) Demonstrated manufacturing capacity coming on line;
    - (ii) The acquisition of another domestic manufacturer or its manufacturing facility or facilities; or
    - (iii) A global pandemic or other public health emergency that increases patients diagnosed with medical conditions treated by metered dose inhalers.
  - (2) [Reserved]
- (c) The relevant agency official will determine the quantity of application-specific allowances to issue to each company by:
  - (1) Taking the higher of the use of regulated substances by the company in the specific application in the prior year multiplied by:
    - (i) The average growth rate of use for the company over the past three years; or

- (ii) The average growth rate of use by all companies requesting allowances for that specific application over the past three years; and
  - (2) Accounting for any additional information provided regarding unique circumstances described in paragraph (b)(1) of this section; and
  - (3) Subtracting out any general pool allowances allocated to the company for that calendar year.
- (d)
  - (1) EPA will allocate application-specific allowances by October 1 of the calendar year prior to the year in which the allowances may be used. The relevant agency official will issue, through a separate notification, application-specific allowances to eligible entities consistent with paragraphs (a) through (c) of this section.
  - (2) EPA will provide public notice by that date of the list of entities receiving application-specific allowances, the quantity of allowances for each entity, and the specific application(s) for which the allowances may be used.
- (e) Entities that use regulated substances in one of the six applications listed in paragraph (a) of this section and were not issued allowances as of October 1, 2021, may request allowances under the procedure in § 84.15. Such entities must meet the criteria for eligibility in this section and are subject to the requirements of this section and § 84.31(h).
- (f) EPA will publish a list of entities allocated application-specific allowances, the application for which they may use regulated substances, and the quantity of allowances allocated.
- (g) Application-specific allowances may be expended for either the import or production of a regulated substance.
- (h) Entities allocated application-specific allowances may confer application-specific allowances to a producer, importer, or other supplier without being subject to the offset required of transfers of allowances in § 84.19. The recipient of a conferred application-specific allowance may continue to confer the allowance until it is expended for production or import. When conferring application-specific allowances, the conferring party must provide a statement certifying that the regulated substances produced or imported with the conferred allowances will only be used for the application-specific use associated with the allowance(s). The producer(s), importer(s), and/or supplier(s) receiving application-specific allowances must certify to the conferring party that they will not sell regulated substances produced or imported with application-specific allowances for any application or use other than the application-specific use associated with the allowance(s).

[86 FR 55201, 55208, Oct. 5, 2021]

#### **§ 84.15 Set-aside of application-specific allowances, production allowances, and consumption allowances.**

- (a) Total allowances available under this section to be allocated for calendar years 2022 and 2023 are:
  - (1) Up to 7.5 million metric tons of exchange value equivalent consumption allowances annually for calendar years 2022 and 2023.
  - (2) Up to 2.5 million metric tons of exchange value equivalent production allowances for calendar years 2022 and 2023.

(b)

- (1) Consumption and production allowances in paragraph (a) of this section are available in the form of application-specific allowances to entities that qualify for application-specific allowances under § 84.13 that were not issued allowances as of October 1, 2021.
- (2) Entities must provide the relevant Agency official with the information contained in § 84.13 by November 30, 2021 to be eligible for consideration.

(c) Consumption allowances in paragraph (a) of this section are available to either:

- (1) Persons who imported regulated substances in 2020 that were not required to report under 40 CFR part 98 and were not issued allowances as of October 1, 2021; or
- (2) Persons who are newly importing regulated substances, do not share corporate or common ownership, corporate affiliation in the past five years, or familial relations with entities receiving allowances through this rule.

(d)

- (1) Persons who meet the criteria listed in paragraph (c)(1) of this section must provide the relevant Agency official with the following information by November 30, 2021, to be eligible for consideration:
  - (i) Name and address of the company, the complete ownership of the company (with percentages of ownership), and contact information for a designated representative at the company;
  - (ii) The following information on an annual basis for all years between 2011 and 2020 where the person imported regulated substances:
    - (A) The total quantity (in kilograms) imported of each regulated substance each year, including each shipment, dates of and port of entry for each import, and country from which the imported regulated substances were imported;
    - (B) The Harmonized Tariff Schedule codes and CAS numbers for the regulated substances or blends imported;
    - (C) The quantity (in kilograms) of regulated substances imported for use in processes resulting in their transformation or destruction; and
    - (D) The quantity (in kilograms) of regulated substances sold or transferred during that year to each person for use in processes resulting in their transformation or destruction.
  - (iii) The following information on an annual basis for all years between 2011 and 2020 where the person exported regulated substances:
    - (A) The names and addresses of the exporter and the recipient of the exports;
    - (B) The exporter's Employer Identification Number;
    - (C) The quantity of each specific regulated substance exported, including the quantity of regulated substance that is used, reclaimed, or recycled;
    - (D) The date on which, and the port from which, the regulated substances were exported from the United States or its territories;
    - (E) The country to which the regulated substances were exported; and

- (F) The Harmonized Tariff Schedule codes and CAS numbers for the regulated substances shipped.
- (2) Persons who meet the criteria listed in paragraph (c)(2) of this section must provide the relevant Agency official with the following information by November 30, 2021, to be eligible for consideration:
  - (i) Name and address of the company, the complete ownership of the company (with percentages of ownership), and contact information for a designated representative at the company;
  - (ii) Whether the company is a woman- or minority-owned business;
  - (iii) Contact information for the owner of the company;
  - (iv) The date of incorporation and State in which the company is incorporated;
  - (v) State license identifier;
  - (vi) A plan for importing regulated substances;
  - (vii) A prospective foreign exporter that the applicant anticipates working with;
  - (viii) A certification that the business owner understands the regulatory requirements of this part and will make best efforts to comply with the regulatory requirements; and
  - (ix) A certification that the information submitted is complete, accurate, and truthful.
- (e) The relevant Agency official will allocate calendar-year 2022 and 2023 allowances in paragraph (a) of this section no later than March 31, 2022, in the following manner:
  - (1) First, persons who meet the criteria listed in paragraph (b) of this section are allocated application-specific allowances (subtracted from both the production and consumption portions of the set-aside pool) for 2022 equal to the estimated need, based on projected, current, and historical trends, and subject to the same conditions for such allowances in § 84.13;
  - (2) Second, persons who meet the criteria listed in paragraph (c)(1) of this section are allocated allowances for 2022 by calculating their “average high year” based on the formula in § 84.11(a)(1) and then applying the same reduction percentage between the values calculated in § 84.11(a)(1) and (4) for all general pool allowance holders.
  - (3) Third, persons who meet the criteria listed in paragraph (c)(2) of this section are allocated up to 0.2 million metric tons exchange value equivalent in allowances for 2022 and 2023.
  - (4) If the eligible requests received total an amount of allowances that exceeds the remaining quantity of allowances in the set-aside pool, after subtracting allowances issued under paragraphs (b)(1) and (c)(1) of this section, the amount provided to each person who meets the criteria listed in paragraph (c)(2) of this section that has applied to the set-aside pool will be allocated an amount of allowances that is reduced on a pro rata basis. If any allowances remain after the steps outlined in paragraphs (b)(1) and (c)(1) and (2) of this section, those allowances will be distributed to the persons who meet the criteria listed in §§ 84.9 and 84.11 on a pro rata basis.
- (f) EPA is placing restrictions on allowances allocated under this section.
  - (1) Allowances allocated to persons under paragraph (e)(3) of this section, due to their eligibility of meeting the criteria in paragraph (c)(2) of this section, may not be transferred to another entity.

- (2) Allowances issued under this section are not available to companies that are a subsidiary of, have any common ownership stake with, had corporate affiliation in the past five years with, or have a familial relationship with another allowance holder.
- (g) EPA will provide public notice by March 31, 2022, of the list of entities receiving allowances under this paragraph, the quantity of allowances for each entity, and the specific application(s) for which the allowances may be used, where applicable.

#### **§ 84.17 Availability of additional consumption allowances.**

A person may obtain at any time during the year, in accordance with the provisions of this section, consumption allowances equivalent to the quantity of regulated substances that the person exported from the United States and its territories to a foreign country in accordance with this section.

- (a) The exporter must submit to the relevant Agency official a request for consumption allowances setting forth the following:
  - (1) The identities and addresses of the exporter and the recipient of the exports;
  - (2) The exporter's Employer Identification Number;
  - (3) The names, telephone numbers, and email addresses of contact persons for the exporter and the recipient;
  - (4) The quantity (in kilograms) and name of the regulated substances exported;
  - (5) The source of the regulated substances and the date purchased;
  - (6) The date on which, and the port from which, the regulated substances were exported from the United States or its territories;
  - (7) The country to which the regulated substances were exported;
  - (8) A copy of the bill of lading and the invoice indicating the net quantity (in kilograms) of regulated substances shipped and documenting the sale of the regulated substances to the purchaser;
  - (9) The Harmonized Tariff Schedule codes of the regulated substances exported;
  - (10) Internal Transaction Numbers for all shipments; and
  - (11) All international export declaration documentation (*i.e.*, electronic export information), which is electronically filed within AES.
- (b) The relevant Agency official will review the information and documentation submitted under paragraph (a) of this section and will issue a notice to the requestor within 15 working days.
  - (1) The relevant Agency official will determine the quantity of regulated substances that the documentation verifies was exported and issue consumption allowances equivalent to the quantity of regulated substances that were exported.
    - (i) The grant of the consumption allowances will be effective on the date the notice is issued.
    - (ii) The consumption allowances will be granted to the person the exporter indicates, whether it is the producer, the importer, or the exporter.
    - (iii) The consumption allowances will be valid until December 31 of the same calendar year in which the regulated substances were exported.

- (2) The relevant Agency official will issue a notice that the consumption allowances are not granted if the official determines that the information and documentation do not satisfactorily substantiate the exporter's claims.

[86 FR 55208, Oct. 5, 2021, as amended at 88 FR 46896, July 20, 2023]

## § 84.19 Transfers of allowances.

- (a) **Inter-company transfers.** As of January 1, 2022, a person ("transferor") may transfer to any other person ("transferee") any quantity of the transferor's production allowances, consumption allowances, or application-specific allowances for use by the same type of application, as long as the following conditions are met:
  - (1) An offset equal to five percent of the amount of allowances transferred will be deducted from the transferor's production allowance balance if a transfer is made of production allowances, or deducted from the transferor's consumption allowance balance if a transfer is made of consumption allowances. In the case of transferring application-specific allowances, one percent of the amount of allowances transferred will be deducted from the transferor's application-specific allowance balance.
  - (2) The transferor must submit to the relevant Agency official a transfer claim setting forth the following:
    - (i) The identities and addresses of the transferor and the transferee;
    - (ii) The names, telephone numbers, and email addresses of contact persons for the transferor and the transferee;
    - (iii) The type of allowances being transferred, including the specific application (if applicable), for which allowances are to be transferred;
    - (iv) The quantity (in MTEVe) of allowances being transferred;
    - (v) The total cost of the allowances transferred;
    - (vi) The amount of unexpended allowances of the type and for the year being transferred that the transferor holds under authority of this subpart as of the date the claim is submitted to EPA;
    - (vii) The quantity of the offset to be deducted from the transferor's allowance balance; and
    - (viii) For transfers of application-specific allowances, a signed document from the transferee certifying that the transferee will use the application-specific allowances only for the same application for which the application-specific allowance was allocated.
  - (3) The relevant Agency official will determine whether the records maintained by EPA indicate that the transferor possesses unexpended allowances sufficient to cover the transfer claim as of the date the transfer claim is processed. The transfer claim is the quantity in EVE to be transferred plus the quantity of the offset. The relevant Agency official will take into account any previous transfers, any production, and allowable imports and exports of regulated substances reported by the transferor. Within three working days of receiving a complete transfer claim, the relevant Agency official will take action to notify the transferor and transferee as follows:
    - (i) The relevant Agency official will issue a non-objection notice to both the transferor and transferee indicating if EPA's records show that the transferor has sufficient unexpended allowances to cover the transfer claim. In the case of transfers of production allowances or

consumption allowances, the relevant agency official will reduce the transferor's balance of unexpended allowances by the quantity to be transferred plus five percent of that quantity. In the case of transfers of application-specific allowances the relevant agency official will reduce the transferor's balance of unexpended allowances by the quantity to be transferred plus one percent of that quantity. The transferor and the transferee may proceed with the transfer when the relevant agency official issues a non-objection notice. However, if EPA ultimately finds that the transferor did not have sufficient unexpended allowances to cover the claim, the transferor and transferee will be liable for any violations of the regulations of this subpart that occur as a result of, or in conjunction with, the improper transfer.

(ii) The relevant Agency official will issue an objection notice disallowing the transfer if EPA's records show that the transferor has insufficient unexpended allowances to cover the transfer claim, that the transferor has failed to respond to one or more Agency requests to supply information needed to make a determination, or that the transferor or transferee has been notified of an impending administrative consequence and therefore is disallowed from transferring allowances in accordance with § 84.35. Either transferor or transferee may file a notice of appeal, with supporting reasons, with the relevant Agency official within 10 working days after receipt of the objection notice. The official may affirm or vacate the disallowance. If no appeal is filed electronically by the tenth working day after notification, the disallowance shall be final on that day.

(4) The transferor and transferee must maintain a copy of the transfer claim and a copy of EPA's non-objection or objection notice for five years.

(5) An entity does not need to follow the procedures in this paragraph (a) to expend allowances possessed by another entity that is majority owned by it, it majority owns, related to it through majority ownership, or commonly owned with it.

(b) *International transfers of production allowances* —

(1) **Requests.** A person may request to increase or decrease their production allowances for a specified control period through transfers of such allowances with a person in a foreign country if the applicable conditions in this paragraph are met. Once transferred, all allowances transferred consistent with this paragraph will function as a production allowance, as defined in § 84.3.

(i) **Timing of requests.** Any request for an increase or decrease in production allowances based on an international transfer under this paragraph must be submitted by October 1 of the year prior to the calendar year in which the transferred allowances would be usable.

(ii) **Timing of the transfer.** International transfers under this paragraph will be deemed to occur, and the transferred allowances will be usable, as of January 1 of the calendar year to which the transfer applies.

(2) **Transfer from a person in a foreign country—information requirements.**

(i) A person requesting to change their production allowances based on a transfer from a person in a foreign country must submit to the relevant Agency official at the time the international transfer is requested a signed document from an official representative in that country's embassy in the United States stating that the appropriate authority within that country has revised the domestic production limits for that country equal to the lowest of the following three production quantities and identifying which of the following three production quantities was lowest:

- (A) The maximum production level permitted in § 84.7(b) in the year of the international transfer minus the quantity of production allowances (in exchange value-weighted kilograms) to be transferred;
  - (B) The maximum production level for the applicable regulated substances that are allowed under applicable law (including the foreign country's applicable domestic law) minus the quantity of production allowances (in exchange value-weighted kilograms) to be transferred; or
  - (C) The average of the foreign country's actual national production level of the applicable regulated substances for the three calendar years prior to the year of the transfer minus the quantity of production allowances (in exchange value-weighted kilograms) to be transferred.
- (ii) A person requesting a revision based on a transfer from a foreign country ("transferee") must also submit to the relevant Agency official a true copy of the document that sets forth the following:
- (A) The identity and address of the transferee;
  - (B) The foreign country authorizing the transfer;
  - (C) The names, telephone numbers, and email addresses of contact persons for the transferee and for the person in the foreign country;
  - (D) The name of the chemical and quantity (in kilograms) of production being transferred;
  - (E) Documentation that the foreign country possesses the necessary quantity of unexpended production rights;
  - (F) The calendar year to which the transfer applies; and
  - (G) A signed statement from a responsible official describing whether the increased production is intended for export or the market in the United States.
- (3) ***Transfer to a person in a foreign country—Information requirements.*** A person requesting a transfer to a person in a foreign country must submit a request to the relevant Agency official that sets forth the following information:
- (i) The identity and address of the person seeking to transfer the allowances ("transferor");
  - (ii) The foreign country authorizing the transfer;
  - (iii) The names, telephone numbers, and email addresses of contact persons for the transferor and for the person in the foreign country;
  - (iv) The name of the chemical and quantity (in kilograms) of allowable production being transferred; and
  - (v) The calendar year to which the transfer applies;
  - (vi) A signed statement from a responsible official requesting that the relevant Agency official revise the number of production allowances the transferor holds such that the aggregate national production in the United States is equal to the lowest of the following three production quantities and identifying which of the following three production quantities was lowest:



- (A) The maximum production level permitted in § 84.7(b) in the year of the international transfer minus the quantity of production allowances (in exchange value-weighted kilograms) to be transferred;
  - (B) The maximum production for the applicable regulated substances that are allowed under applicable law minus the quantity of production allowances (in exchange value-weighted kilograms) to be transferred; or
  - (C) The average of the United States' actual national production level of the applicable regulated substances for the three calendar years prior to the year of the transfer minus the quantity of production allowances (in exchange value-weighted kilograms) to be transferred.
- (4) **Review of international transfer request to a foreign country.** After receiving a transfer request that meets the requirements of paragraph (b)(3) of this section, the relevant Agency official may, at his/her discretion, consider the following factors in deciding whether to approve such a transfer:
  - (i) Possible economic hardships created by a transfer;
  - (ii) Potential effects on trade;
  - (iii) Potential environmental implications; and
  - (iv) The total quantity of unexpended production allowances held by entities in the United States.
- (5) **Notice of transfer.** The relevant Agency official will review the submitted requests to determine whether the foreign country in which the person is located has enacted or otherwise established the same or similar requirements or otherwise undertaken commitments regarding the production and consumption of regulated substances as are contained in the AIM Act, within a reasonable time frame of the date of its enactment. If it is determined that these conditions are not met, the relevant Agency official will notify the requestor in writing that no transfers to or from the country can occur. If these conditions are satisfied such that transfers to or from the country can occur, the relevant Agency official will consider if the request meets the applicable requirements of paragraph (b) of this section. If the request meets the requirements of paragraph (b)(2) of this section for transfers from foreign countries and paragraph (b)(3) of this section for transfers to foreign countries, and if the relevant Agency official has not decided to disapprove the request based on consideration of factors listed in paragraph (b)(4) of this section if applicable, the relevant Agency official will notify the person in writing that the appropriate production allowances were either granted or deducted and specify the control period to which the transfer applies. Notifications of production allowances granted or deducted will be provided before January 1 of the calendar year to which the transfer applies.
  - (i) For transfers from a foreign country, such notification will reflect a revision of the balance of allowances held by the recipient of the transfer to equal the unexpended production allowances held by the recipient of the transfer plus the quantity of allowable production transferred from the foreign country minus an offset of five percent of the quantity transferred. The relevant Agency official will not adjust available allowances until the foreign country's representative has confirmed the appropriate number of allowances were deducted in the foreign country.

- (ii) For transfers to a foreign country, such notification will reflect a revision of the balance of production allowances for the transferor such that the aggregate national production of the regulated substance to be transferred is equal to the value the relevant Agency official determines to be the lowest of:
  - (A) The maximum production level permitted in § 84.7(b) in the year of the international transfer minus the quantity of production allowances transferred and minus an offset of five percent of the quantity transferred; or
  - (B) The maximum production level for the applicable regulated substances that is allowed under applicable law (in exchange-value weighted kilograms) minus the quantity of production allowances transferred and minus an offset of five percent of the quantity transferred; or
  - (C) The average of the actual annual U.S. production of the applicable regulated substances for the three years prior to the date of the transfer (in exchange-value weighted kilograms minus the quantity of production allowances transferred and minus an offset of five percent of the quantity transferred).
- (6) **Revised production limit for previous transferors.** If the average actual U.S. production during the three most recent calendar years before the date of the transfer is less than the total allowable U.S. production for the applicable regulated substances permitted in § 84.7(b) for a calendar year for which international transfers are approved to occur, the aggregate allowed national U.S. production of those substances will be reduced by an additional amount beyond a simple deduction of the number of allowances reflected in the notifications under paragraph (b)(5)(ii)(B) of this section. In these circumstances, the relevant Agency official will revise the production limit for each transferor who obtained approval of a transfer of the applicable regulated substances to a foreign country in the same calendar year and notify each transferor of the revision in writing. The amount of the revision will equal the result of the following set of calculations:
  - (i) The total U.S. allowable production of the applicable regulated substances minus the average of the actual annual U.S. production of those substances during the three most recent calendar years prior to the calendar year of the transfer.
  - (ii) The quantity of production allowances for the applicable regulated substances transferred by the transferor in that calendar year divided by the total quantity of production allowances for those substances approved for transfer to a person in a foreign country by all the persons approved to make such transfers in that calendar year.
  - (iii) The result of paragraph (b)(6)(i) of this section multiplied by the result of paragraph (b)(6)(ii) of this section.
  - (iv) The unexpended production allowances held by the person minus the result of paragraph (b)(6)(iii) of this section.
- (7) **Effective date of revised production limit s.** If a revision is issued under paragraph (b)(6) of this section, the change in production allowances will be effective on the date that the notification is issued.

[86 FR 55208, Oct. 5, 2021, as amended at 88 FR 46896, July 20, 2023]

## **§ 84.21 Sale or conveyance of regulated substances produced or imported with application-specific allowances.**

### **(a) *Sale or conveyance of regulated substances produced or imported using application-specific allowances.***

- (1)** As of January 1, 2022, any person receiving an application-specific allowance (application-specific seller) may sell or convey regulated substances produced or imported by expending that allowance to another person within the same application (application-specific purchaser) provided that the relevant Agency official approves the sale or conveyance.
- (2)** The application-specific seller must submit a claim to the relevant Agency official for approval before the sale or conveyance can take place. The claim must set forth the following:
  - (i)** The identities and addresses of the application-specific seller and the application-specific purchaser;
  - (ii)** The name, telephone numbers, and email addresses of contact persons for the application-specific seller and the application-specific purchaser;
  - (iii)** The amount of each regulated substance being sold or conveyed;
  - (iv)** The cost of the regulated substance being sold or conveyed;
  - (v)** The application for which allowances were allocated and the specific products that the application-specific purchaser plans to produce with the regulated substances; and
  - (vi)** Certification that the regulated substances will be used only for the same application for which the application-specific allowance under which the substances were produced or imported was allocated.
- (3)** The application-specific purchaser must submit a letter to the relevant Agency official stating that it concurs with the terms of the sale or conveyance as requested by the application-specific seller.
- (4)** Once the claim is complete, and if EPA does not object to the sale or conveyance, the relevant agency official will issue letters to the application-specific seller and the application-specific purchaser within 10 business days indicating that the transaction may proceed. EPA reserves the right to disallow a transaction if the claim is incomplete, or if it has reason to believe that the application-specific purchaser plans use the regulated substance in anything other than the stated application. If EPA objects to the transaction, the relevant agency official will issue letters to the application-specific seller and the application-specific purchaser stating the basis for disallowing the transaction.
- (5)** The burden of proof is placed on the application-specific purchaser to retain sufficient records to prove that the sold or conveyed regulated substances are used only for the stated application.

### **(b) [Reserved]**

[86 FR 55208, Oct. 5, 2021]

## **§ 84.23 [Reserved]**

## **§ 84.25 Required processes to import regulated substances as feedstocks or for destruction.**

### **(a)**

- (1) *Petition to import regulated substances for use in a process resulting in transformation or destruction.*  
A person must petition the relevant Agency official for the import of each individual shipment of a regulated substance imported for use in a process resulting in transformation or destruction in order to not expend allowances. A petition is required at least 30 days before the shipment is to arrive at a U.S. port, and must contain the following information:
- (i) Name, Harmonized Tariff Schedule code, and quantity in kilograms of each regulated substance to be imported;
  - (ii) Name and address of the importer, the importer ID number, and the contact person's name, email address, and phone number;
  - (iii) Name and address of the consignee and the contact person's name, email address, and phone number;
  - (iv) Source country;
  - (v) The U.S. port of entry for the import, the expected date of import, and the vessel transporting the material. If at the time of submitting the petition the entity does not know this information, and the entity receives a non-objection notice for the individual shipment in the petition, the entity is required to notify the relevant Agency official of this information prior to the date of importation (consistent with the definition at 19 CFR 101.1) of the individual shipment into the United States;
  - (vi) Name and address of any intermediary, including a contact person's name, email address and phone number, who will hold the material before the regulated substances are transformed or destroyed;
  - (vii) Name, address, contact person, email address, and phone number of the responsible party at the facility where the regulated substance will be used in a process resulting in the substance's transformation or destruction;
  - (viii) An English translation, if needed, of the export license, application for an export license, or official communication acknowledging the export from the appropriate government agency in the country of export;
  - (ix) The capacity of the container; and
  - (x) The unique identification number of the container used to transport the regulated substances as part of the petition.
- (2) *Review of petition to import for use in a process resulting in transformation or destruction.*
- (i) The relevant Agency official will initiate a review of the information submitted under paragraph (a)(1) of this section and take action within 21 days to issue either an objection notice or a non-objection notice for the individual shipment to the person who submitted the petition.
  - (ii) The relevant Agency official may issue an objection notice to a petition for the following reasons:

- (A) If the relevant Agency official determines that the information is insufficient; that is, if the petition lacks or appears to lack any of the information required under paragraph (a)(1) of this section or other information that may be requested during the review of the petition necessary to verify that the regulated substance is for use in a process resulting in transformation or destruction;
  - (B) If the relevant Agency official determines that any portion of the petition contains false, inaccurate, or misleading information, or the official has information from other U.S. or foreign government agencies indicating that the petition contains false, inaccurate, or misleading information.
- (iii) Within 10 working days after receipt of an objection notice with the basis being "insufficient information," the importer may re-petition the relevant Agency official. If no re-petition is taken by the tenth working day after the date on the objection notice, the objection shall become final. Only one re-petition will be accepted for any petition received by EPA.
- (iv) Any information contained in the re-petition which is inconsistent with the original petition must be identified and a description of the reason for the inconsistency must accompany the re-petition.
- (v) In cases where the relevant Agency official does not object to the petition, the official will issue a non-objection notice.
- (vi) If, following EPA's issuance of a non-objection notice, new information is brought to EPA's attention which shows that the non-objection notice was issued based on false, inaccurate, or misleading information, then EPA has the right to:
- (A) Revoke and void the non-objection notice from the approval date;
  - (B) Pursue all means to ensure that the regulated substance is not imported into the United States; and
  - (C) Take appropriate enforcement and apply administrative consequences.
- (3) **Timing.**
- (i) An individual shipment authorized through a non-objection notice must be used in the process resulting in its transformation within one year of import.
  - (ii) An individual shipment authorized through a non-objection notice must be used in the process resulting in its destruction within 120 days of import.
- (4) **Quantity.** An individual shipment authorized through a non-objection notice may not exceed the quantity (in MTEVe) of the regulated substance stated in the non-objection notice.

(b)

- (1) **Petition to import used regulated substances for disposal by destruction.** A person must petition the relevant Agency official for the import of each individual shipment of a used regulated substance imported for purposes of destruction in order to not expend allowances. A petition is required at least 30 working days before the shipment is to leave the foreign port of export, and contain the following information:
- (i) Name, Harmonized Tariff Schedule code, and quantity in kilograms of each regulated substance to be imported;

- (ii) Name and address of the importer, the importer ID number, and the contact person's name, email address, and phone number;
- (iii) Name and address of the consignee and the contact person's name, email address, and phone number;
- (iv) Name and address of any intermediary who will hold regulated substances imported for destruction, and the contact person's name, email address, and phone number;
- (v) Source country;
- (vi) An English translation, if needed, of the export license (or application for an export license) from the appropriate government agency in the country of export;
- (vii) The U.S. port of entry for the import, the expected date of import, and the vessel transporting the material. If at the time of submitting the petition the importer does not know this information, and the importer receives a non-objection notice for the individual shipment in the petition, the importer is required to notify the relevant Agency official of this information prior to the entry of the individual shipment into the United States; and
- (viii) Name, address, contact person, email address, and phone number of the responsible party at the destruction facility.

(2) *Review of petition to import for destruction.*

- (i) The relevant Agency official will initiate a review of the information submitted under paragraph (b)(1) of this section and take action within 30 working days to issue either an objection notice or a non-objection notice for the individual shipment to the person who submitted the petition.
- (ii) The relevant Agency official may issue an objection notice to a petition for the following reasons:
  - (A) If the relevant Agency official determines that the information is insufficient; that is, if the petition lacks or appears to lack any of the information required under paragraph (b)(1) of this section or other information that may be requested during the review of the petition necessary to verify that the regulated substance is used;
  - (B) If the relevant Agency official determines that any portion of the petition contains false, inaccurate, or misleading information, or the relevant Agency official has information from other U.S. or foreign government agencies indicating that the petition contains false, inaccurate, or misleading information;
  - (C) If allowing the import of the used regulated substance would run counter to government restrictions from either the country of recovery or export regarding regulated substances;
  - (D) If destruction capacity is installed or is being installed for that specific regulated substance in the country of recovery or country of export and the capacity is funded in full or in part through the Multilateral Fund to the Montreal Protocol.
- (iii) Within 10 working days after receipt of an objection notice with the basis being "insufficient information," the importer may re-petition the relevant Agency official. If no re-petition is taken by the tenth working day after the date on the objection notice, the objection shall become final. Only one re-petition will be accepted for any petition received by EPA.

- (iv) Any information contained in the re-petition that is inconsistent with the original petition must be identified and a description of the reason for the inconsistency must accompany the re-petition.
- (v) In cases where the relevant Agency official does not object to the petition, the official will issue a non-objection notice.
- (vi) If, following EPA's issuance of a non-objection notice, new information is brought to EPA's attention which shows that the non-objection notice was issued based on false, inaccurate, or misleading information, then EPA and the relevant Agency official has the right to:
  - (A) Revoke and void the non-objection notice from the approval date;
  - (B) Pursue all means to ensure that the regulated substance is not imported into the United States; and
  - (C) Take appropriate enforcement and apply administrative consequences.
- (3) **Timing.** An individual shipment authorized through a non-objection notice must be destroyed within 120 days of import.
- (4) **Quantity.** An individual shipment authorized through a non-objection notice may not exceed the quantity (in MTEVe) of the regulated substance stated in the non-objection notice.
- (5) **Proof of destruction.** For each individual shipment of a used regulated substance imported with the intent to destroy that substance for which EPA issues a non-objection notice, an importer must submit to the Administrator records indicating that the substance has been destroyed with their quarterly reports in § 84.31(c)(1).
- (6) **Recordkeeping.** The person receiving the non-objection notice from the relevant Agency official for a petition to import used regulated substances must maintain the following records for five years:
  - (i) A copy of the petition;
  - (ii) The EPA non-objection notice;
  - (iii) The bill of lading for the import;
  - (iv) The U.S. Customs entry number; and
  - (v) Records demonstrating that the substance has been destroyed in accordance with approved technologies in § 84.29.

[86 FR 55208, Oct. 5, 2021, as amended at 88 FR 46896, July 20, 2023]

## § 84.27 Controlling emissions of HFC-23.

- (a) No later than October 1, 2022, as compared to the amount of chemical intentionally produced on a facility line, no more than 0.1 percent of HFC-23 created on the line may be emitted.
  - (1) **Requests for extension.** The producer may submit a request to the relevant Agency official to request a six-month extension, with a possibility of one additional six-month extension, to meet the 0.1 percent HCFC-23 limit. No entity may have a compliance date later than October 1, 2023.
  - (2) **Timing of request.** The extension request must be submitted to EPA no later than August 1, 2022, for a first-time extension or February 1, 2023, for a second extension.

- (3) **Content of request.** The extension request must contain the following information:
  - (i) Name of the facility submitting the request, contact information for a person at the facility, and the address of the facility.
  - (ii) A description of the specific actions the facility has taken to improve their HFC-23 control, capture, and destruction; the facility's plans to meet the 0.1 percent HFC-23 limit including the expected date by which the equipment will be installed and operating; and verification that the facility has met all applicable reporting requirements.
- (4) **Review of request.** Starting on the first working day following receipt by the relevant Agency official of a complete request for extension, the relevant Agency official will initiate review of the information submitted under paragraph (a)(3) of this section and take action within 30 working days. Any grant of a compliance deferral by the relevant Agency official will be made public.
- (b) Captured HFC-23 is permitted to be destroyed at a different facility than where it is produced. In such instances, HFC-23 emissions during the transportation to and destruction at the different facility will be incorporated into calculations of whether the producer meets the 0.1 percent standard outlined in paragraph (a) of this section.

[86 FR 55208, Oct. 5, 2021]

## § 84.29 Destruction of regulated substances.

- (a) The following technologies are approved by the Administrator for destruction of all regulated substances except for HFC-23:
  - (1) Cement kiln;
  - (2) Gaseous/fume oxidation;
  - (3) Liquid injection incineration;
  - (4) Porous thermal reactor;
  - (5) Reactor cracking;
  - (6) Rotary kiln incineration;
  - (7) Argon plasma arc;
  - (8) Nitrogen plasma arc;
  - (9) Portable plasma arc;
  - (10) Chemical reaction with hydrogen and carbon dioxide;
  - (11) Gas phase catalytic de-halogenation; and
  - (12) Superheated steam reactor.
- (b) The following technologies are approved by the Administrator for destruction of HFC-23:
  - (1) Gaseous/fume oxidation;
  - (2) Liquid injection incineration;



- (3) Reactor cracking;
- (4) Rotary kiln incineration;
- (5) Argon plasma arc;
- (6) Nitrogen plasma arc;
- (7) Chemical reaction with hydrogen and carbon dioxide; and
- (8) Superheated steam reactor.

[86 FR 55208, Oct. 5, 2021]

### § 84.31 Recordkeeping and reporting.

- (a) **Recordkeeping and reporting.** Any person who produces, imports, exports, transforms, uses as a process agent, destroys, reclaims, or repackages regulated substances or is receiving application-specific allowances in the six applications listed in subsection (e)(4)(B)(iv) of the AIM Act must comply with the following recordkeeping and reporting requirements:
  - (1) Reports required by this section must be submitted within 45 days of the end of the applicable reporting period, unless otherwise specified.
  - (2) Reports, petitions, and any related supporting documents must be submitted electronically in a format specified by EPA.
  - (3) Records and copies of reports required by this section must be retained for five years.
  - (4) Quantities of regulated substances must be stated in terms of kilograms unless otherwise specified.
  - (5) Reports are no longer required if an entity notifies the Administrator that they have permanently ceased production, import, export, destruction, transformation, use as a process agent, reclamation, or packaging of regulated substances, but the entity must continue to comply with all applicable recordkeeping requirements.
- (b) **Producers.** Persons (“producers”) who produce regulated substances must comply with the following recordkeeping and reporting requirements:
  - (1) **One-time report.** Within 120 days of January 1, 2022, or within 120 days of the date that a producer first produces a regulated substance, whichever is later, every producer must submit to the Administrator a report describing:
    - (i) The method by which the producer in practice measures daily quantities of regulated substances produced;
    - (ii) Conversion factors by which the daily records as currently maintained can be converted into kilograms of regulated substances produced, including any constants or assumptions used in making those calculations (e.g., tank specifications, ambient temperature or pressure, density of the regulated substance);
    - (iii) Internal accounting procedures for determining plant-wide production;
    - (iv) The quantity of any fugitive losses accounted for in the production figures;

- (v) A list of any coproducts, byproducts, or emissions from the production line that are other regulated substances; ozone-depleting substances listed in 40 CFR part 82, subpart A; or hazardous air pollutants initially identified in section 112 of the Clean Air Act, and as revised through rulemaking and codified in 40 CFR part 63;
  - (vi) The estimated percent efficiency of the production process for the regulated substance; and
  - (vii) A description of any processes that use a regulated substance as a process agent. Within 60 days of any change in the measurement procedures or the information specified in the above report, the producer must submit a report specifying the changes to the relevant Agency official.
- (2) **Reporting—producers.** Within 45 days after the end of each quarter, each producer of a regulated substance must provide to the relevant Agency official a report containing the following information for each facility:
- (i) The quantity (in kilograms) of production of each regulated substance used in processes resulting in their transformation by the producer; for any regulated substance that is used in processes resulting in their transformation at a facility that differs from the facility of production, but both facilities are owned by the producer, the name, quantity (in kilograms), and recipient facility of each regulated substance; and the quantity (in kilograms) intended for transformation by a second party;
  - (ii) The quantity (in kilograms) of production of each regulated substance used in processes resulting in their destruction by the producer; for any regulated substance that is used in processes resulting in their destruction at a facility that differs from the facility of production, but both facilities are owned by the producer, the name, quantity (in kilograms), and recipient facility of each regulated substance; and the quantity (in kilograms) intended for destruction by a second party;
  - (iii) The quantity (in kilograms) of production of each regulated substance used as a process agent by the producer; for any regulated substance that is used as a process agent at a facility that differs from the facility of production, but both facilities are owned by the producer, the name, quantity (in kilograms), and recipient facility of each regulated substance; and the quantity (in kilograms) intended for use as a process agent by a second party;
  - (iv) The quantity (in exchange value equivalents) of allowances expended for each regulated substance and the quantity (in kilograms) of each regulated substance produced;
  - (v) The quantity (in kilograms) of regulated substances sold or transferred during the quarter to a person other than the producer for use in processes resulting in their transformation, destruction, or use as a process agent;
  - (vi) The quantity (in kilograms) of regulated substances produced by the producer that were exported by the producer or by other U.S. companies to a foreign country that will be transformed or destroyed and therefore were produced without expending production or consumption allowances;
  - (vii) For transformation in the United States or by a person in a foreign country, one copy of a transformation verification from the transformer for the specific regulated substance(s) and a list of additional quantities shipped to that same transformer for the quarter;

- (viii) For destruction in the United States or by a person in a foreign country of a regulated substance that was produced without allowances, one copy of a destruction verification for each particular destroyer confirming it destroyed the same regulated substance, and a list of additional quantities shipped to that same destroyer for the quarter;
  - (ix) A list of the entities conferring application-specific allowances from whom orders were placed, and the quantity (in kilograms) of specific regulated substances produced for those listed applications; and
  - (x) For the fourth quarter report only, the quantity of each regulated substance held in inventory on December 31.
- (3) **Recordkeeping—producers.** Every producer of a regulated substance must maintain the following records:
- (i) Dated records of the quantity (in kilograms) of each regulated substance produced at each facility;
  - (ii) Dated records of the quantity (in kilograms) of regulated substances produced for use in processes that result in their transformation, destruction, or as a process agent;
  - (iii) Dated records of the quantity (in kilograms) of regulated substances sold for use in processes that result in their transformation, destruction, or as a process agent;
  - (iv) Dated records of the quantity (in kilograms) of regulated substances produced by expending conferred application-specific allowances and quantity sold for use in each listed application;
  - (v) Copies of invoices or receipts documenting sale of regulated substances for use in processes that result in their transformation, destruction, or as a process agent;
  - (vi) Dated records of the quantity (in kilograms) of each regulated substance used at each facility as feedstocks or destroyed in the manufacture of a regulated substance or in the manufacture of any other substance, and any regulated substance introduced into the production process of the same regulated substance at each facility;
  - (vii) Dated records of the quantity (in kilograms) of each regulated substance used at each facility as a process agent;
  - (viii) Dated records identifying the quantity (in kilograms) of each coproduct and byproduct chemical not a regulated substance produced within each facility also producing one or more regulated substances;
  - (ix) Dated records of the quantity (in kilograms) of raw materials and feedstock chemicals used at each facility for the production of regulated substances;
  - (x) Dated records of the shipments of each regulated substance produced at each plant;
  - (xi) Dated records of batch tests of regulated substances packaged for sale or distribution, including instrument calibration, sample testing data files, audit trail files, and results summaries of both sample test results and quality control test results that are in a form suitable and readily available for review;
  - (xii) The quantity (in kilograms) of regulated substances, the date received, and names and addresses of the source of used materials containing regulated substances which are recycled or reclaimed at each plant;

- (xiii) Records of the date, the regulated substance, and the estimated quantity of any spill or release of a regulated substance that equals or exceeds 100 pounds;
- (xiv) The transformation verification in the case of transformation, or the destruction verification in the case of destruction, showing that the purchaser or recipient of a regulated substance, in the United States or in another foreign country, certifies the intent to either transform or destroy the regulated substance, or sell the regulated substance for transformation or destruction in cases when allowances were not expended; and
- (xv) The certifications from application-specific allowance holders stating that the regulated substances were purchased solely for an application listed in § 84.5(c)(2) and will not be resold for use in a different application or used in any other manufacturing process.

(4) ***Additional Requirements: producers of HFC-23.***

- (i) Each producer of HFC-23 must include the following additional information in their one-time report in paragraph (b)(1) of this section:
  - (A) Information on the capacity to produce the intended chemical on the line on which HFC-23 is produced;
  - (B) A description of actions taken at the facility to control the generation of HFC-23 and its emissions;
  - (C) Identification of approved destruction technology and its location intended for use for HFC-23 destruction;
  - (D) A copy of the destruction removal efficiency report associated with the destruction technology; and
  - (E) Within 60 days of any change in the information specified in the above report, the producer must submit a report specifying the changes to the relevant Agency official.
- (ii) Each producer of HFC-23 must include the following additional information in their fourth quarter report:
  - (A) Annual facility-level data on HFC-23 (in metric tons) on amounts: Emitted; generated; generated and captured for any purpose; generated and captured for consumptive use; generated and captured for feedstock use in the United States; generated and captured for destruction; used for feedstock without prior capture; and destroyed without prior capture.
  - (B) [Reserved]
- (iii) If captured HFC-23 is destroyed in a subsequent control period, producers must submit records to EPA indicating the HFC-23 has been destroyed in their next quarterly report.
- (iv) In developing any required report, each producer of HFC-23 must abide by the following monitoring and quality assurance and control provisions:
  - (A) To calculate the quantities of HFC-23 generated and captured for any use, generated and captured for destruction, used for feedstock without prior capture, and destroyed without prior capture, facilities shall comply with the monitoring methods and quality assurance and control requirements set forth at 40 CFR 98.414 and the calculation methods set forth at 40 CFR 98.413, except 40 CFR 98.414(p) shall not apply.

- (B) To calculate the quantity of HFC-23 emitted, facilities shall comply with the monitoring methods and quality assurance and control requirements set forth at 40 CFR 98.124 and the calculation methods set forth at 40 CFR 98.123.

(5) **Agency assumption** —For any person who fails to maintain the records required by this paragraph, or to submit the reports required by this paragraph, EPA may assume that the person has produced at full capacity during the period for which records were not kept.

(c) **Importers.** Persons (“importers”) who import regulated substances must comply with the following recordkeeping and reporting requirements:

- (1) **Reporting—importers.** Within 45 days after the end of each quarter, an importer of record of a regulated substance must submit to the relevant Agency official a report containing the following information:
  - (i) Summaries of the records required in paragraph (c)(2) of this section for the previous quarter;
  - (ii) The total quantity (in kilograms) imported of each regulated substance for that quarter;
  - (iii) The Harmonized Tariff Schedule codes for the regulated substances or blends imported;
  - (iv) A list of the application-specific allowance holders from whom orders were placed, number of application-specific allowances conferred, and the quantity (in kilograms) of specific regulated substances imported for those listed applications;
  - (v) The quantity (in kilograms) of regulated substances imported for use in processes resulting in their transformation or destruction;
  - (vi) The quantity (in kilograms) of regulated substances sold or transferred during that quarter to each person for use in processes resulting in their transformation or destruction;
  - (vii) The transformation verifications showing that the purchaser or recipient of imported regulated substances intends to transform those substances or destruction verifications showing that the purchaser or recipient intends to destroy the regulated substances;
  - (viii) Records required under § 84.25(b)(5) documenting proof that material imported for destruction was destroyed; and
  - (ix) For the fourth quarter report only, the quantity of each regulated substance held in inventory on December 31.
- (2) **Recordkeeping—importers.** An importer of a regulated substance must maintain the following records:
  - (i) The quantity (in kilograms) of each regulated substance imported, either alone or in mixtures, including the percentage of each mixture that consists of a regulated substance;
  - (ii) The quantity (in kilograms) of used regulated substances imported for destruction under the process described in § 84.25(b);
  - (iii) The quantity (in kilograms) of regulated substances imported for use in processes resulting in their transformation or destruction;
  - (iv) The quantity (in kilograms) of regulated substances imported and sold for use in processes that result in their transformation or destruction;

- (v) The date on which the regulated substances were imported;
- (vi) The port of entry through which the regulated substances passed;
- (vii) The country from which the imported regulated substances were imported;
- (viii) The company that produced the imported regulated substances;
- (ix) The Harmonized Tariff Schedule code for the regulated substances imported;
- (x) The importer number for the shipment;
- (xi) A copy of the bill of lading for the import;
- (xii) The invoice for the import;
- (xiii) The U.S. Customs entry number;
- (xiv) Dated records documenting the sale or transfer of regulated substances for use in processes resulting in their transformation or destruction;
- (xv) Copies of transformation verifications or destruction verifications indicating that the regulated substances will be transformed or destroyed;
- (xvi) Dated records of the quantity of regulated substances imported for an application listed at § 84.5(c)(2);
- (xvii) The certifications from application-specific allowance holders stating that the regulated substances were purchased solely for an application listed in § 84.5(c)(2) and will not be resold for use in a different application or used in any other manufacturing process;
- (xviii) Dated records of batch tests of regulated substances packaged for sale or distribution, including instrument calibration, sample testing data files, audit trail files, and results summaries of both sample test results and quality control test results that are in a form suitable and readily available for review; and
- (xix) For any entity subject to an order issued by the Department of Commerce that is receiving allowances for 2022 or 2023, documentation of cash deposit of and final payment of the antidumping and countervailing duty for regulated substances imported.

(3) **Transshipments.**

- (i) A person must notify the relevant Agency official of each shipment of a regulated substance that is to be transhipped through the United States. The notification is required at least 30 working days before the shipment is to leave the foreign port of export for importation into the United States as a transshipment, and must contain the following information:
  - (A) Name, Harmonized Tariff Schedule code, and quantity in kilograms of each regulated substance to be transhipped;
  - (B) Name and address of the importer, the importer ID number, and the contact person's name, email address, and phone number;
  - (C) Source country; and

- (D) The U.S. port of entry, the expected date of importation (consistent with the definition at 19 CFR 101.1), and the vessel transporting the material. If at the time of submitting the petition the importer does not know this information, the importer is required to notify the relevant Agency official of this information prior to the entry of each shipment into the United States.
- (ii) The person in paragraph (c)(3)(i) of this section must notify the relevant Agency official of each shipment of a regulated substance that has been transhipped when it is exported from the United States. The notification is required at least 10 working days after the shipment is exported from the United States, and must contain the following information:
  - (A) Name, Harmonized Tariff Schedule code, and quantity in kilograms of each regulated substance to be transhipped;
  - (B) Name and address of the importer, the importer ID number, and the contact person's name, email address, and phone number; and
  - (C) Date of departure and name of vessel.
- (iii) Any person who tranships a regulated substance must maintain records that indicate:
  - (A) That the regulated substance shipment originated in a foreign country;
  - (B) That the regulated substance shipment is destined for another foreign country; and
  - (C) That the regulated substance shipment will not enter U.S. commerce within the United States.
- (4) **Additional recordkeeping requirements—importers of used regulated substances for destruction.** A person receiving a non-objection notice from the relevant Agency official to import used regulated substances for destruction must maintain the following records:
  - (i) A copy of the petition to import for destruction;
  - (ii) The EPA non-objection notice;
  - (iii) A copy of the export license, export license application, or official communication from the appropriate government agency in the country of export;
  - (iv) An English translation of the document in paragraph (c)(4)(iii) of this section;
  - (v) U.S. Customs entry documents for the import that must include the Harmonized Tariff Schedule codes;
  - (vi) The date, amount, and name of the regulated substances sent for destruction, per shipment;
  - (vii) An invoice from the destruction facility verifying the shipment was received; and
  - (viii) Records from the destruction facility indicating that the substance has been destroyed.
- (5) **Recordkeeping requirements—aggregators.** A person aggregating a regulated substance prior to destruction, regardless of whether the person is an importer, must:
  - (i) Maintain transactional records that include the name and address of the entity from whom they received the regulated substance imported for destruction;

- (ii) Maintain transactional records that include the name and address of the entity to whom they sent the regulated substance imported for destruction;
  - (iii) Maintain records that include the date and quantity of the imported regulated substance received for destruction;
  - (iv) Maintain records that include the date and quantity of the imported regulated substance sent for destruction; and
  - (v) If the person is the final aggregator of such a regulated substance before the material is destroyed, maintain a copy of records indicating that the substance has been destroyed.
- (6) **Recordkeeping requirements—vessel owners/operators.** A person offloading regulated substances recovered from equipment aboard a marine vessel, aircraft, or other aerospace vehicle while in a U.S. port must maintain records of the company name, vessel name or identifier, location of the appliance, date of recovery, person doing the recovery, the amount of regulated substances recovered and type of refrigerant recovered for each servicing event, and the amount of each regulated substance or blend of regulated substances offloaded and the date it was offloaded.
- (7) **Additional reporting for importers of record.** The importer of record must include the following no later than 10 days if arriving by marine vessel or 5 days for non-marine vessel prior to the date of importation (consistent with the definition at 19 CFR 101.1), via a U.S. Customs and Border Protection-authorized electronic data interchange system, such as the Automated Broker Interface (authorized agents may permissibly file on behalf of an importer of record):
- (i) Cargo Description;
  - (ii) Net weight;
  - (iii) Container number(s) associated with the shipment, as applicable;
  - (iv) Gross Weight;
  - (v) Weight Unit of Measure;
  - (vi) Port of Entry;
  - (vii) Scheduled Entry Date;
  - (viii) Harmonized Tariff Schedule (HTS) code;
  - (ix) Harmonized Tariff Schedule (HTS) Description;
  - (x) Origin Country;
  - (xi) Importer of Record Name and Associated Number;
  - (xii) Consignee Entity Name;
  - (xiii) CAS Number(s) of the regulated substance(s) imported and, for regulated substances that are in a mixture, either the ASHRAE numerical designation of the refrigerant or the percentage of the mixture containing each regulated substance;
  - (xiv) If importing regulated substances for transformation or destruction, a copy of the non-objection notice issued consistent with § 84.25;



- (xv) If importing regulated substances as a transshipment, a copy of the confirmation documenting the entity reported the transshipment consistent with paragraph (c)(3)(i) of this section; and
- (xvi) A certificate of analysis, if the certificate of analysis is not physically accompanying the shipment pursuant to § 84.5(b)(1)(v)).

(8) **One-time report—payment of antidumping and countervailing duties.** By November 30, 2021, any entity importing regulated substances subject to an antidumping and countervailing duty order issued by the Department of Commerce that is receiving allowances for 2022 or 2023 must provide documentation of cash deposit of and final payment of such duties for the regulated substances imported from January 1, 2017, through May 19, 2021, or provide evidence that those imports were not subject to such duties for those years.

(9) **Importer of record information.**

- (i) Any entity that falls under any of the following criteria must submit the information outlined in paragraph (c)(9)(ii) of this section:
  - (A) That is issued allowances by EPA and anticipates being the importer of record for a shipment of regulated substances; or
  - (B) That is not issued allowances by EPA, but receives transferred or conferred allowances.
- (ii) The following information must be submitted to EPA by the date specified under paragraph (c)(9)(iii) of this section:
  - (A) Names of all subsidiaries;
  - (B) Entities commonly owned or majority owned by the same person or persons;
  - (C) Alternative names under which the entity does business;
  - (D) Importer of record numbers; and
  - (E) If providing information under paragraph (c)(9)(ii) (A), (B), or (C) of this section:
    - (1) The relationship between the allowance holder and each subsidiary and each entity commonly owned or majority owned by the same person or persons, including alternative names under which each listed entity does business; and
    - (2) If applicable, the identity of owners and their respective percentage of ownership.
- (iii) The information outlined in paragraph (c)(9)(ii) of this section must be submitted each year by:
  - (A) November 15 after being issued allowances for an entity that falls under paragraph (c)(9)(i)(A) of this section; or
  - (B) within 15 calendar days of receiving a non-objection notice for conferral of application-specific allowances pursuant to § 84.13(h) or for inter-company transfer of consumption allowances pursuant to § 84.19(a) for an entity that falls under paragraph (c)(9)(i)(B) of this section.
- (iv) If changes occur to the information previously provided to the Agency, such changes must be transmitted to the Agency at least 21 days prior to expenditure of allowances pursuant to § 84.5(b)(1)(i).

(d) **Exporters.** Persons (“exporters”) who export regulated substances must comply with the following reporting requirements:

(1) **Reporting requirements—exporters.** Within 45 days after the end of each quarter, each exporter of a regulated substance must submit to the relevant Agency official a report containing the following information if such information was not already reported under paragraph (b)(2) of this section:

- (i) The names and addresses of the exporter and the recipient of the exports;
- (ii) The exporter's Employer Identification Number;
- (iii) The quantity of each specific regulated substance exported, including the quantity of regulated substance that is used, reclaimed, or recycled;
- (iv) The date on which, and the port from which, the regulated substances were exported from the United States or its territories;
- (v) The country to which the regulated substances were exported;
- (vi) The Harmonized Tariff Schedule codes for the regulated substances shipped;
- (vii) For persons exporting for transformation or destruction of the regulated substance, the invoice or sales agreement containing language similar to the transformation verifications that importers use, or destruction verifications showing that the purchaser or recipient intends to destroy the regulated substances; and
- (viii) For the fourth quarter report only, the quantity of each regulated substance held in inventory on December 31.

(2) **Recordkeeping.**

- (i) Exporters must maintain dated records of batch tests of regulated substances packaged for sale or distribution, including instrument calibration, sample testing data files, audit trail files, and results summaries of both sample test results and quality control test results that are in a form suitable and readily available for review.
- (ii) [Reserved]

(3) **Used regulated substances.** Any exporter of used regulated substances must indicate on the bill of lading or invoice that the regulated substance is used.

(e) **Second-party transformation and destruction.** Any person who transforms or destroys regulated substances produced or imported by another person must comply with the following recordkeeping and reporting requirements:

(1) **Reporting—second-party transformation and destruction.** Any person who transforms or destroys regulated substances produced or imported by another person must report the following for each facility:

- (i) The names and quantities (in kilograms) of the regulated substances transformed for each calendar year within 45 days after the end of that year; and
- (ii) The names and quantities (in kilograms) of the regulated substances destroyed for each calendar year within 45 days after the end of that year.

- (2) **Recordkeeping—second-party transformation and destruction.** Any person who transforms or destroys regulated substances produced or imported by another person must maintain the following:
- (i) Copies of the invoices or receipts documenting the sale or transfer of the regulated substances to the person;
  - (ii) Records identifying the producer or importer of the regulated substances received by the person;
  - (iii) Dated records of inventories of regulated substances at each plant on the first day of each quarter;
  - (iv) Dated records of the quantity (in kilograms) of each regulated substance transformed or destroyed;
  - (v) In the case where regulated substances were purchased or transferred for transformation purposes, a copy of the person's transformation verification;
  - (vi) Dated records of the names, commercial use, and quantities (in kilograms) of the resulting chemical(s) when the regulated substances are transformed;
  - (vii) Dated records of shipments to purchasers of the resulting chemical(s) when the regulated substances are transformed; and
  - (viii) In the case where regulated substances were purchased or transferred for destruction purposes, a copy of the person's destruction verification.
- (3) **Transformation verifications.** Any person who purchases regulated substances for purposes of transformation must provide the producer or importer of the regulated substances with a transformation verification that the regulated substances are to be used in processes that result in their transformation. The verification can only be valid for one year. The transformation verification shall include the following:
- (i) Identity and address of the person intending to transform the regulated substances;
  - (ii) The quantity (in kilograms) of regulated substances intended for transformation;
  - (iii) Identity of shipments by purchase order number(s), purchaser account number(s), location(s), or other means of identification;
  - (iv) Period of time over which the person intends to transform the regulated substances; and
  - (v) Signature and title of the verifying person.
- (4) **Destruction verifications.** Any person who purchases or receives regulated substances in processes that result in their destruction shall provide the producer or importer of the regulated substances with a destruction verification that the regulated substances are to be used in processes that result in their destruction. The verification can only be valid for up to 120 days. The destruction verification shall include the following:
- (i) Identity and address of the person intending to destroy regulated substances;
  - (ii) The quantity (in kilograms) of regulated substances intended for destruction;

- (iii) Identity of shipments by purchase order number(s), purchaser account number(s), location(s), or other means of identification;
- (iv) The destruction efficiency at which such substances will be destroyed;
- (v) Period of time over which the person intends to destroy regulated substances; and
- (vi) Signature and title of the verifying person.

(5) **Transformation reporting—one-time report.** Within 120 days of January 1, 2022, or within 120 days of the date that an entity first transforms a regulated substance, whichever is later, any person who transforms a regulated substance must provide EPA with a one-time report containing the following information:

- (i) A description of the transformation use;
- (ii) A description of all technologies and actions taken to minimize emissions of regulated substances;
- (iii) The name of the product manufactured in the process;
- (iv) A list of any coproducts, byproducts, or emissions from the line on which the regulated substance is to be transformed that are other regulated substances; ozone-depleting substances listed in 40 CFR part 82, subpart A; or hazardous air pollutants initially identified in section 112 of the Clean Air Act, and as revised through rulemaking and codified in 40 CFR part 63;
- (v) The estimated annual fugitive emissions by chemical associated with the transformation process;
- (vi) The anticipated ratio of regulated substance used for transformation to the amount of end product manufactured; and
- (vii) A mass balance equation of the transformation reaction.

(f) **All destruction facilities —**

(1) **Destruction—one-time report.** Within 120 days of January 1, 2022, or within 120 days of the date that an entity first destroys a regulated substance, whichever is later, every person who destroys regulated substances, whether in a process for destruction or for disposal of a used substance, shall provide EPA with a report containing the following information:

- (i) The destruction unit's destruction efficiency;
- (ii) The methods used to determine destruction efficiency;
- (iii) The methods used to record the volume destroyed;
- (iv) The name of other relevant federal or state regulations that may apply to the destruction process; and
- (v) Any changes to the information in this paragraph must be reflected in a revision to be submitted to EPA within 60 days of the change(s).

(2) **Proof of destruction.** Any person who destroys used regulated substances for disposal of that substance, shall provide the importer or aggregator with a record indicating the substance was destroyed within 30 days of the date of destruction.

(g) **Process agents** —

- (1) **Reporting—one-time report.** Within 120 days of January 1, 2022, or within 120 days of the date that an entity first uses a regulated substance as a process agent, whichever is later, any person who uses a regulated substance as a process agent must provide EPA a one-time report containing the following information:
  - (i) A description of the process agent use that includes details of the percentages of process agent retained within the process, recovered after the process, and emitted or entrained in the final product;
  - (ii) A description of all technologies and actions taken to minimize emissions of regulated substances;
  - (iii) The name of the product and byproducts manufactured in the process; and
  - (iv) The anticipated ratio of process agent emissions to end product manufactured.
- (2) **Annual report.** Any person who uses a regulated substance as a process agent must provide an annual report containing the following information:
  - (i) Contact information including email address and phone number for a primary and alternate contact person;
  - (ii) The amount of regulated substance used as a process agent;
  - (iii) The amount of product and the amount of byproducts manufactured (including amounts eventually destroyed or used as feedstock);
  - (iv) The stack point source emissions; and
  - (v) A description of any regulated substance emission reduction actions planned or currently under investigation.

(h) **Holders of application-specific allowances.**

- (1) **Reporting.** Any person allocated application-specific allowances, except for persons receiving application-specific allowances for mission-critical military end uses, must submit to the relevant Agency official a report by July 31 (covering prior activity from January 1 through June 30) and January 31 (covering prior activity from July 1 through December 31) of each year. The report shall contain the following information:
  - (i) The quantity (in kilograms) of regulated substances acquired through conferring allowances during the previous six months;
  - (ii) The quantity (in kilograms) of regulated substances acquired through expending allowances and directly imported during the previous six months;
  - (iii) The quantity (in kilograms) of regulated substances purchased for application-specific use without expending application-specific allowances during the previous six months (*i.e.*, from the open market);
  - (iv) The quantity (in kilograms) of inventory on the last day of the previous six-month period of each regulated substance for application-specific use held by the reporting company or held under contract by another company for the reporting company's use;

- (v) The quantity (in kilograms) of each regulated substance for application-specific use that was destroyed or recycled during the previous six months;
  - (vi) The names and contact information of each company to which application-specific allowances were conferred, and the quantity of allowances conferred from each company, and the quantity of regulated substances received from each company;
  - (vii) In the July 31 report only, a description of plans to transition application-specific use of regulated substances to regulated substances with a lower exchange value or alternatives to regulated substances;
  - (viii) In the July 31 report only, if a company is requesting additional allowances due to one or more of the circumstances listed in § 84.13(b)(1), the report must include a projection of the monthly quantity of additional regulated substances needed for application-specific use(s) by month in the next calendar year and a detailed explanation, including relevant supporting documentation to justify the additional need; and
  - (ix) In the July 31 report only, if a company is contracting out the manufacturing of defense sprays or metered dose inhalers, or paying another person (whether it is in cash, credit, goods, or services) to perform the servicing of onboard aerospace fire suppression, the name, address, and email address for a representative of the person doing the manufacturing or servicing, and clarification on whether the responses in paragraph (h)(1) of this section apply to the company that is allocated application-specific allowances or the company receiving the contract for manufacturing and/or servicing using application-specific allowances.
- (2) **New Requests.** Persons requesting application-specific allowances for the first time must submit to EPA the following information:
- (i) A description of the use of regulated substances and a detailed explanation of how the use is an application-specific use listed in § 84.13(a);
  - (ii) Total quantity (in kilograms) of all regulated substances acquired for application-specific use in the previous three years, including a copy of the sales records, invoices, or other records documenting that quantity;
  - (iii) The name of the entity or entities supplying regulated substances for application-specific use and contact information for those suppliers;
  - (iv) The quantities (in kilograms) of regulated substances held in inventory for application-specific use as of June 30 of the prior year and June 30 in the current year;
  - (v) A description of plans to transition to regulated substances with a lower exchange value or alternatives to regulated substances;
  - (vi) If a company is requesting additional allowances due to one or more of the circumstances listed in § 84.13(b)(1), the report must include a projection of the monthly quantity of additional regulated substances needed by month in the next calendar year and a detailed explanation, including relevant supporting documentation to justify the additional need; and
  - (vii) If a company is contracting out the manufacturing of defense sprays or metered dose inhalers, or contracting out the servicing of onboard aerospace fire suppression, the name, address, and email address for a representative of the person doing the manufacturing or servicing, and

clarification on whether the responses in paragraph (h)(2) of this section apply to the company that is requesting application-specific allowances or the company receiving the contract for manufacturing and/or servicing using application-specific allowances.

- (3) **Report for Application-specific Allowances for Mission-critical Military End Use.** The Department of Defense must provide a report to EPA biannually by July 31 (covering prior activity from January 1 through June 30) and January 31 (covering prior activity from July 1 through December 31) of each year contains the following information:
- (i) The quantity (in kilograms) of each regulated substance acquired for application-specific use by conferring application-specific allowances;
  - (ii) The quantity of inventory on June 30 of each regulated substance for application-specific use held by the Department of Defense or held under contract by another company for use by the Department of Defense;
  - (iii) The quantity of each regulated substance requested for mission-critical military end uses in the next calendar year;
  - (iv) The broad sectors of use covered by current mission-critical military end uses in the next calendar year; and
  - (v) A description of plans to transition application-specific use(s) to regulated substances with a lower exchange value or alternatives to regulated substances, including not-in-kind substitutes.
- (4) **Conferral of allowances.** Entities who confer application-specific allowances, except for the conferral of allowances for mission-critical military end uses, must submit the following information about each conferral to the relevant Agency official prior to conferring allowances:
- (i) The identities and addresses of the conferrer and the conferee;
  - (ii) The names, telephone numbers, and email addresses of contact persons for the conferrer and the conferee;
  - (iii) The specific application for which application-specific allowances are to be conferred;
  - (iv) The quantity (in MTEVe) of application-specific allowances being conferred;
  - (v) The amount of unexpended application-specific allowances of the type and for the year being conferred that the conferrer holds under authority of this subpart as of the date the claim is submitted to EPA; and
  - (vi) A certification from the conferrer and the conferee stating that the regulated substances being acquired, produced, or imported are solely for an application listed in § 84.5(c)(2) and will not be resold for use in a different application or used in any other manufacturing process.
- (5) **Confirmation of conferral.** If the conferrer has sufficient application-specific allowances for the conferral, the conferral will occur and the relevant Agency official will issue a confirmation notice to both the conferrer and conferee documenting the conferral occurred. The relevant agency official will reduce the conferrer's balance of unexpended allowances by the quantity conferred. However, if EPA ultimately finds that the conferrer did not have sufficient unexpended allowances to cover the conferral or that the regulated substances produced or imported with conferred allowances are used for anything other than the specific application identified in the conferee's submittal and for the

application those allowances were allocated for, the conferrer and conferee will be liable for any violations of the regulations of this subpart that occur as a result of, or in conjunction with, the improper conferral.

- (6) **Recordkeeping.** Entities who receive via allocation, transfer, or conferral of application-specific allowances, except for mission-critical military end uses, must maintain the following records for five years:

- (i) Records necessary to develop the biannual reports;
- (ii) A copy of certifications provided to entities when conferring and transferring allowances for application-specific use;
- (iii) A copy of confirmation notices when conferring allowances for application-specific use;
- (iv) A copy of the annual submission requesting application-specific allowances;
- (v) Invoices and order records related to the purchase of regulated substances;
- (vi) Records related to the transfer and conferral of application-specific allowances to other entities; and
- (vii) Records documenting how regulated substances acquired with application-specific allowances were used.

- (7) **Recordkeeping—Mission-Critical Military End Uses.** The Department of Defense must maintain the following records:

- (i) Records necessary to develop the annual report;
- (ii) A copy of certifications provided to entities when conferring allowances for application-specific use;
- (iii) Invoices and order records related to the purchase of regulated substances;
- (iv) Records documenting the conferral(s) of application-specific allowances to other entities up to and including the producer and or importer of the chemical;
- (v) Records documenting the transfer of regulated substances to an agent or unit of the Department of Defense where the regulated substance will be used for mission-critical applications; and
- (vi) Copies of current and historical plans prescribed by the Office of the Secretary of Defense documenting internal Department of Defense monitoring and review procedures for accuracy.

- (i) **Reclaimers.** Persons (“reclaimers”) who reclaim regulated substances must comply with the following recordkeeping and reporting requirements:

- (1) **One-time report.** By February 14, 2022, any person who reclaims a regulated substance must provide a one-time report containing the following information:

- (i) The quantity of each regulated substance held in inventory as of December 31, 2021, broken out by whether the regulated substance is recovered, reclaimed, and virgin;
- (ii) The name of the laboratory that conducts batch testing and a signed statement from that laboratory confirming there is an ongoing business relationship with the claimer;



- (iii) The number of batches tested for each regulated substance or blend containing a regulated substance in the prior year; and
  - (iv) The number of batches that did not meet the specifications in appendix A to 40 CFR part 82, subpart F in the prior year.
- (2) **Quarterly Reporting.** Within 45 days after the end of each quarter, each reclaimer of a regulated substance must submit to the relevant Agency official a report containing the quantity of material (the combined mass of regulated substance and contaminants) by regulated substance sent to them for reclamation, the total mass of each regulated substance, and the total mass of waste products.
- (3) **Annual Reporting.** Within 45 days after the end of the fourth quarter, each reclaimer of a regulated substance must submit to the relevant Agency official a report containing the quantity of each regulated substance held in inventory onsite as of December 31 broken out by whether the regulated substance is recovered, reclaimed, and virgin.
- (4) **Recordkeeping.**
  - (i) Reclaimers must maintain records, by batch, of the results of the analysis conducted to verify that reclaimed regulated substance meets the necessary specifications in appendix A to 40 CFR part 82, subpart F (based on AHRI Standard 700-2016), including instrument calibration, sample testing data files, audit trail files, and results summaries of both sample test results and quality control test results that are in a form suitable and readily available for review. Such records must be maintained for five years.
  - (ii) Reclaimers must maintain records of the names and addresses of persons sending them material for reclamation and the quantity of the material (the combined mass of regulated substance and contaminants) by regulated substance sent to them for reclamation. Such records must be maintained on a transactional basis for five years.
- (j) **Fire suppressant recycling.** Persons ("recycler") who recycle regulated substances used as a fire suppressant must comply with the following recordkeeping and reporting requirements:
  - (1) **Quarterly Reporting.** Within 45 days after the end of each quarter, each recycler of a regulated substance used as a fire suppressant must submit to the relevant Agency official a report containing the quantity of material (the combined mass of regulated substance and contaminants) by regulated substance sent to them for recycling, the total mass of each regulated substance recycled, and the total mass of waste products.
  - (2) **Annual Reporting.** Within 45 days after the end of the fourth quarter, each recycler of a regulated substance used as a fire suppressant must submit to the relevant Agency official a report containing the quantity of each regulated substance held in inventory onsite broken out by recovered, recycled, and virgin.
  - (3) **Recordkeeping.**
    - (i) Recyclers must maintain records of the names and addresses of persons sending them material for recycling and the quantity of the material (the combined mass of regulated substance and contaminants) by regulated substance sent to them for recycling. Such records must be maintained on a transactional basis for five years.

- (ii) Recyclers must maintain dated records of batch tests of regulated substances packaged for sale or distribution, including instrument calibration, sample testing data files, audit trail files, and results summaries of both sample test results and quality control test results that are in a form suitable and readily available for review.
- (k) **Repackagers.** Persons who transfer regulated substances, either alone or in a blend from one container to another container prior to sale or distribution or offer for sale or distribution must comply with the following recordkeeping requirements:
  - (1) **Recordkeeping.** Repackagers must maintain dated records of batch tests of regulated substances packaged for sale or distribution, including instrument calibration, sample testing data files, audit trail files, and results summaries of both sample test results and quality control test results that are in a form suitable and readily available for review.
  - (2) [Reserved]
- (l) **Treatment of Data submitted under 40 CFR part 84.**
  - (1) Except as otherwise provided in paragraph (i) of this section, 40 CFR 2.201 through 2.215 and 2.301 do not apply to data submitted under this part that EPA has determined through rulemaking to be either of the following:
    - (i) Emission data, as defined in 40 CFR 2.301(a)(2), determined in accordance with section 114(c) and 307(d) of the Clean Air Act; or
    - (ii) Data not otherwise entitled to confidential treatment.
  - (2) Except as otherwise provided in paragraph (k)(4) of this section, 40 CFR 2.201 through 2.208 and 2.301(c) and (d) do not apply to data submitted under this part that EPA has determined through rulemaking to be entitled to confidential treatment. EPA shall treat that information as confidential in accordance with the provisions of 40 CFR 2.211, subject to paragraph (h)(4) of this section and 40 CFR 2.209.
  - (3) Upon receiving a request under 5 U.S.C. 552 for data submitted under this part that EPA has determined through rulemaking to be entitled to confidential treatment, the relevant Agency official shall furnish the requestor a notice that the information has been determined to be entitled to confidential treatment and that the request is therefore denied. The notice shall include or cite to the appropriate EPA determination.
  - (4) A determination made through rulemaking that information submitted under this part is entitled to confidential treatment shall continue in effect unless, subsequent to the confidentiality determination through rulemaking, EPA takes one of the following actions:
    - (i) EPA determines through a subsequent rulemaking that the information is emission data or data not otherwise entitled to confidential treatment; or
    - (ii) The Office of General Counsel issues a final determination, based on the requirements of 5 U.S.C. 552(b)(4), stating that the information is no longer entitled to confidential treatment because of change in the applicable law or newly discovered or changed facts. Prior to making such final determination, EPA shall afford the business an opportunity to submit comments on pertinent issues in the manner described by 40 CFR 2.204(e) and 2.205(b). If, after consideration of any timely comments submitted by the business, the Office of General

Counsel makes a revised final determination that the information is not entitled to confidential treatment, the relevant agency official will notify the business in accordance with the procedures described in 40 CFR 2.205(f)(2).

[86 FR 55201, 55215, Oct. 5, 2021, as amended at 88 FR 46896, July 20, 2023]

### § 84.33 Auditing of recordkeeping and reporting.

- (a) Any person producing, importing, exporting, reclaiming, or recycling for fire suppression a regulated substance, as well as any person receiving application-specific allowances, must arrange for annual third-party auditing of reports submitted to EPA except for persons receiving application-specific allowances for mission-critical military end uses.
- (b) For producers, importers, and exporters, auditors must review the inputs the regulated entities used to develop quarterly and annual reports including:
  - (1) The amount of production and consumption allowances allocated;
  - (2) The amount, timing, and parties to allowance transfers, and the associated documentation and offset amount;
  - (3) Records documenting the amount of regulated substances imported, exported, produced, and destroyed, transformed, or sent to another entity for such purpose;
  - (4) Records documenting any application-specific allowances allocated or conferred from other companies, including the amounts of allowances conferred, regulated substances purchased and/or sold, the specific application for which the regulated substances were provided, and the names, telephone numbers, and email addresses for contact persons for the recipient companies;
  - (5) The date and the port from which regulated substances were imported or exported;
  - (6) A copy of the bill of lading and the invoice indicating the quantity of regulated substances imported or exported;
  - (7) Relevant Harmonized Tariff Schedule codes;
  - (8) The number and type of railcars, ISO tanks, individual cylinders, drums, small cans, or other containers used to store and transport regulated substances;
  - (9) The inventory of regulated substances as of the end of the prior calendar year;
  - (10) A random sample (5 percent or 10, whichever is higher) of batch testing results;
  - (11) All other reports submitted to EPA under this subpart.
- (c) For companies issued application-specific allowances by EPA, auditors must review the following:
  - (1) Records documenting the amount of application-specific allowances allocated;
  - (2) The amount, timing, and parties to allowance transfers, and the associated documentation and offset amount;
  - (3) Records documenting any application-specific allowances conferred to or from other companies, including the amounts of allowances conferred, regulated substances purchased, the specific application for which the regulated substances were provided, and the names, telephone numbers, and email addresses for contact persons for the recipient companies;

- (4) Records documenting the total amount of regulated substances purchased for the application-specific end use, and the amount of regulated substances sold to another company for application-specific used;
  - (5) Inventory of regulated substances at the end of the calendar year; and
  - (6) All other reports submitted to EPA under this subpart.
- (d) For reclaimers and fire suppressant recyclers, auditors must review the following:
  - (1) The quantity of regulated substances received for reclamation or recycling;
  - (2) A random sample (5 percent or 10, whichever is higher) of records documenting the names and addresses of persons sending them material and the quantity of the material, measured in the combined mass of refrigerant and contaminants, by regulated substance to them;
  - (3) Records documenting the quantity of regulated substances reclaimed;
  - (4) All other reports submitted to EPA under this subpart.
- (e) An auditor must meet the following requirements:
  - (1) The auditor must be a certified public accountant, or firm of such accountants, that is independent of the regulated person. Such an auditor must comply with the requirements for professional conduct, including the independence requirements, and the quality control requirements in 40 CFR 1090.1800(b)(1)(ii), as well as applicable rules of state boards of public accountancy. Such an auditor must also meet the requirements to perform an attestation engagement in 40 CFR 1090.1800(b)(1)(ii).
  - (2) The auditor must meet the independence requirements in paragraph (f) of this section.
  - (3) Any auditor suspended or debarred under 2 CFR part 1532 or 48 CFR part 9, subpart 9.4, is not qualified to perform attestation engagements under this section.
- (f) All reports required under this paragraph must be signed and certified as meeting all the applicable requirements of this subpart by the independent third-party auditor. The auditor must:
  - (1) Attest that the information in the audit report is accurate;
  - (2) Attest that the company submitted all required reports to the Agency or specify which reports are missing and provide an assessment on whether missing reports should have been submitted; and
  - (3) Obtain a signed statement from a responsible corporate officer that all reports submitted to the EPA for the prior calendar year are complete and accurate.
- (g) The following provisions apply to each audit performed under this section:
  - (1) The auditor must prepare a report identifying the applicable procedures specified in this section along with the auditor's corresponding findings for each procedure. The auditor must submit the report electronically to EPA by May 31 of the year following the compliance period.
  - (2) The auditor must identify any instances where compared values do not agree or where specified values do not meet applicable requirements under this part.
  - (3) Laboratory analysis refers to the original test result for each analysis of a product's properties.

- (4) For a reclaimer that relies on a third-party laboratory for batch testing, the laboratory analysis consists of the results provided by the third-party laboratory.
- (h) The independent third party, their contractors, subcontractors, and their organizations must be independent of the regulated party. All the criteria listed in paragraph (a) of this section must be met by each person involved in the specified activities in this section that the independent third party is hired to perform for a regulated party.
- (1) **Employment criteria.** No person employed by an independent third party, including contractor and subcontractor personnel, who is involved in a specified activity performed by the independent third party under the provisions of this section, may be employed, currently or previously, by the regulated party for any duration within the 12 months preceding the date when the regulated party hired the independent third party to provide services under this section.

(2) **Financial criteria.**

- (i) The third-party's personnel, the third-party's organization, or any organization or individual that may be contracted or subcontracted by the third party must meet all the following requirements:
  - (A) Have received no more than one-quarter of their revenue from the regulated party during the year prior to the date of hire of the third party by the regulated party for any purpose.
  - (B) Have no interest in the regulated party's business. Income received from the third party to perform specified activities under this section is excepted.
  - (C) Not receive compensation for any specified activity in this section that is dependent on the outcome of the specified activity.
- (ii) The regulated party must be free from any interest in the third-party's business.
- (iii) [Reserved]
- (iv) Department of Defense data and reports for application-specific allowances for mission-critical military end uses shall be subject to internal Department of Defense monitoring and review for accuracy as prescribed by the Office of the Secretary of Defense. The results of this review shall be reported electronically to EPA by May 31 of the year following the compliance period.

[86 FR 55221, Oct. 5, 2021, as amended at 89 FR 73592, Sept. 11, 2024]

## § 84.35 Administrative consequences.

- (a) The relevant agency official may retire, revoke, or withhold the allocation of allowances, or ban a company from receiving future allowance allocations, using the process outlined in paragraph (b) of this section. Applying an administrative consequence to retire, revoke, or withhold allocation of allowances does not, in any way, limit the ability of the United States to exercise any other authority to bring an enforcement action under any applicable law or regulation.
- (b) The relevant agency official will provide a company notice if the Agency intends to retire, revoke, or withhold allocation of allowances, or ban the company from receiving future allowance allocations. The notice will specify the conduct leading to the administrative consequence and what the consequence will be. The relevant agency official will provide such notice no less than 30 days before the impending consequence.

- (1) After the relevant agency official provides notice of an impending administrative consequence, the company for which such consequence is pending may not expend, transfer, or confer any allowances.
- (2) Any company receiving such a notification may provide information or data to EPA on why the administrative consequence should not be taken within 14 days of the date of the EPA's notice.
- (3) If EPA does not receive a response within 14 days of the date of the Agency notice of impending administrative consequence, the administrative consequences will be effective on the date specified in the notice.

[86 FR 55221, Oct. 5, 2021]

### § 84.37 Incorporation by reference.

Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. All approved incorporation by reference (IBR) material is available for inspection at EPA and at the National Archives and Records Administration (NARA). Contact EPA at: U.S. EPA's Air and Radiation Docket; EPA West Building, Room 3334, 1301 Constitution Ave. NW, Washington, DC, 202-566-1742. For information on the availability of this material at NARA, visit [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html) or email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov). The material also may be obtained from the following sources.

- (a) Air-Conditioning, Heating, and Refrigeration Institute (AHRI), 2311 Wilson Boulevard, Suite 400, Arlington, VA 22201; phone: 703.524.8800; website: [www.ahrinet.org](http://www.ahrinet.org).
  - (1) 2008 Appendix C to AHRI Standard 700-2014, 2008 Appendix C for Analytical Procedures for AHRI Standard 700-2014—Normative, copyright 2008; into § 84.5(i).
  - (2) AHRI RTL OM December 2019, Refrigerant Testing Laboratory Certification Program Operations Manual, copyright 2019; IBR approved for § 84.3.
  - (3) AHRI General OM—January 2023, General Operations Manual, copyright 2022; IBR approved for § 84.3.
- (b) ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428; phone: 610.832.9500; email: [service@astm.org](mailto:service@astm.org); website: [www.astm.org/](http://www.astm.org/).
  - (1) ASTM D6064-11 (reapproved 2022), Standard Specification for HFC-227ea, 1,1,1,2,3,3,3-Heptafluoropropane (CF<sub>3</sub>CHFCF<sub>3</sub>), approved November 1, 2022; IBR approved for § 84.5(i).
  - (2) ASTM D6231/D6231M-21, Standard Specification for HFC-125 (Pentafluoroethane, C<sub>2</sub>H<sub>5</sub>F<sub>5</sub>), approved June 1, 2021; IBR approved for § 84.5(i).
  - (3) ASTM D6541-21, Standard Specification for HFC-236fa, 1,1,1,3,3,3-Hexafluoropropane, (CF<sub>3</sub>CH<sub>2</sub>CF<sub>3</sub>), approved June 1, 2021; IBR approved for § 84.5(i).
  - (4) ASTM D6806-02 (reapproved 2022), Standard Practice for Analysis of Halogenated Organic Solvents and Their Admixtures by Gas Chromatography, approved May 1, 2022; IBR approved for § 84.5(i).
- (c) International Organization for Standardization (ISO), Chemin de Blandonnet 8, CP 401—1214 Vernier, Geneva, Switzerland; tel.: + 41 22 749 01 11; fax: + 41 22 733 34 30; email: [central@iso.org](mailto:central@iso.org); website: [www.iso.org](http://www.iso.org).

- (1) ISO/IEC 17025:2017(E), "General requirements for the competence of testing and calibration laboratories", Third Edition, published November 2017; IBR approved for § 84.3.
- (2) [Reserved]

[88 FR 46898, July 20, 2023, as amended at 88 FR 46898, July 20, 2023]

## Subpart B—Restrictions on the Use of Hydrofluorocarbons

**Source:** At 88 FR 73205, Oct. 24, 2023, unless otherwise noted.

### § 84.50 Purpose.

The purpose of the regulations in this subpart is to implement subsection (i) of 42 U.S.C. 7675, with respect to establishing restrictions on the use of a regulated substance in the sector or subsector in which the regulated substance is used, and to provide requirements associated with the submission of petitions seeking such restrictions.

### § 84.52 Definitions.

For the terms not defined in this subpart but that are defined in § 84.3, the definitions in § 84.3 shall apply. For the purposes of this subpart:

**Blend containing a regulated substance** means any mixture that contains one or more regulated substances.

**Export** means the transport of a product or specified component using a regulated substance from inside the United States or its territories to persons outside the United States or its territories, excluding United States military bases and ships for onboard use.

**Exporter** means the person who contracts to sell any product or specified component using a regulated substance for export or transfers a product or specified component using a regulated substance to an affiliate in another country.

**Importer** means any person who imports any product or specified component using or intended for use with a regulated substance into the United States. Importer includes the person primarily liable for the payment of any duties on the merchandise or an authorized agent acting on his or her behalf. The term also includes:

- (1) The consignee;
- (2) The importer of record;
- (3) The actual owner; or
- (4) The transferee, if the right to withdraw merchandise from a bonded warehouse has been transferred.

**Install** means to complete a field-assembled system's circuit, including charging with a full charge, such that the system can function and is ready for use for its intended purpose.

**Manufacture** means to complete the manufacturing and assembly processes of a product or specified component such that it is ready for initial sale, distribution, or operation.

**Product** means an item or category of items manufactured from raw or recycled materials which performs a function or task and is functional upon completion of manufacturing. The term includes, but is not limited to: appliances, foams, fully formulated polyols, self-contained fire suppression devices, aerosols, pressurized dispensers, and wipes.

**Retrofit** means to upgrade existing equipment where the regulated substance is changed, which—

- (1) Includes the conversion of equipment to achieve system compatibility; and
- (2) May include changes in lubricants, gaskets, filters, driers, valves, o-rings, or equipment components for that purpose. Examples of equipment subject to retrofit include air-conditioning and refrigeration appliances, fire suppression systems, and foam blowing equipment.

**Sector** means a broad category of applications including but not limited to: refrigeration, air conditioning and heat pumps; foams; aerosols; chemical manufacturing; cleaning solvents; fire suppression and explosion protection; and semiconductor manufacturing.

**Specified component** for purposes of equipment in the refrigeration, air conditioning, and heat pump sector means condensing units, condensers, compressors, evaporator units, and evaporators.

**Subsector** means processes, classes of applications, or specific uses that are related to one another within a single sector or subsector.

**Substitute** means any substance, blend, or alternative manufacturing process, whether existing or new, that may be used, or is intended for use, in a sector or subsector with a restriction on the use of regulated substances and that has a lower global warming potential than the GWP limit or restricted list of regulated substances and blends in that sector or subsector.

**System** means an assemblage of separate components that typically are connected and charged in the field with a regulated substance or substitute to perform a function or task.

**Use** means for any person to take any action with or to a regulated substance, regardless of whether the regulated substance is in bulk, contained within a product, or otherwise, except for the destruction of a regulated substance. Actions include, but are not limited to, the utilization, deployment, sale, distribution, offer for sale or distribution, discharge, incorporation, transformation, or other manipulation.

#### **§ 84.54 Restrictions on the use of hydrofluorocarbons.**

- (a) No person may manufacture or import any product in the following sectors or subsectors that uses a regulated substance as listed in this paragraph:
  - (1) Effective January 1, 2025, self-contained residential and light commercial air conditioning and heat pump products using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
  - (2) Effective January 1, 2025, residential dehumidifiers using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
  - (3) Effective January 1, 2025, household refrigerators and freezers using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;
  - (4) Effective January 1, 2025, retail food refrigeration—stand-alone units using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;



- (5) Effective January 1, 2025, vending machines using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;
- (6) Effective January 1, 2025, refrigerated transport—intermodal containers with the temperature of the refrigerant entering the evaporator (for direct heat exchange systems) or the temperature of the fluid exiting (for chillers) of  $-50^{\circ}\text{C}$  ( $-58^{\circ}\text{F}$ ) or higher using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
- (7) Effective January 1, 2025, self-contained products in refrigerated transport—road and refrigerated transport—marine subsectors using any of the following: R-402A, R-402B, R-404A, R-407B, R-408A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-438A, R-507A, R-125/290/134a/600a (55/1/42.5/1.5), RS-44 (2003 formulation) or GHG-X5;
- (8) Self-contained automatic commercial ice machines as follows:
  - (i) Effective January 1, 2026, ice maker products with a harvest rate as determined in accordance with 10 CFR 431.134, using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater as follows:
    - (A) Batch type, as defined in 10 CFR 431.132, with a harvest rate less than or equal to 1,000 pounds of ice per 24 hours;
    - (B) Continuous type, as defined in 10 CFR 431.132, with a harvest rate less than or equal to 1,200 pounds of ice per 24 hours;
  - (ii) Effective January 1, 2027, batch type ice maker products, as defined in 10 CFR 431.132, with a harvest rate greater than 1,000 pounds of ice per 24 hours, as determined in accordance with 10 CFR 431.134, and continuous type ice machine products, as defined in 10 CFR 431.132, with a harvest rate greater than 1,200 pounds of ice per 24 hours, as determined in accordance with 10 CFR 431.134, using any of the following: R-402A, R-402B, R-404A, R-407A, R-407B, R-407C, R-407F, R-408A, R-410A, R-410B, R-411A, R-411B, R-417A, R-417C, R-420A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-428A, R-434A, R-437A, R-438A, R-442A, R-507A, HFC-134a, R-125/290/134a/600a (55/1/42.5/1.5), RB-276, RS-24 (2002 formulation), RS-44 (2003 formulation), GHG-X5, G2018C, or Freeze 12;
- (9) Self-contained refrigerated food processing and dispensing products as follows:
  - (i) Effective January 1, 2027, products outside the scope of UL 621, “Ice Cream Makers,” Edition 7, dated May 07, 2010, with revisions through September 16, 2020, as of December 26, 2023, with refrigerant charge sizes less than or equal to 500 g using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;
  - (ii) Effective January 1, 2027, products outside the scope of UL 621, “Ice Cream Makers,” Edition 7, dated May 7, 2010, with revisions through September 16, 2020, as of December 26, 2023, with refrigerant charge sizes greater than 500 g, using any of the following: R-402A, R-402B, R-404A, R-407A, R-407B, R-407C, R-407F, R-407H, R-408A, R-410A, R-410B, R-411A, R-411B, R-417A, R-417C, R-420A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-427A, R-428A, R-434A, R-437A, R-438A, R-507A, HFC-134a, HFC-227ea, R-125/290/134a/600a (55/1/42.5/1.5), RB-276, RS-24 (2002 formulation), RS-44 (2003 formulation), GHG-X5, or Freeze 12; and

- (iii) Effective January 1, 2028, for refrigerated food processing and dispensing products within the scope of UL 621, "Ice Cream Makers," Edition 7, dated May 7, 2010, with revisions through September 16, 2020, as of December 26, 2023, using any of the following: R-402A, R-402B, R-404A, R-407A, R-407B, R-407C, R-407F, R-407H, R-408A, R-410A, R-410B, R-411A, R-411B, R-417A, R-417C, R-420A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-427A, R-428A, R-434A, R-437A, R-438A, R-507A, HFC-134a, HFC-227ea, R-125/290/134a/600a (55/1/42.5/1.5), RB-276, RS-24 (2002 formulation), RS-44 (2003 formulation), GHG-X5, or Freeze 12.
- (10) Chillers, when a stand-alone product, as follows:
  - (i) Effective January 1, 2025, chillers for comfort cooling using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
  - (ii) Effective January 1, 2025, chillers for ice rinks using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
  - (iii) Effective January 1, 2026, chillers for industrial process refrigeration where the temperature of the fluid exiting the chiller is greater than  $-22^{\circ}\text{F}$  ( $-30^{\circ}\text{C}$ ) using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
  - (iv) Effective January 1, 2028, chillers for industrial process refrigeration where the temperature of the fluid exiting the chiller is greater than or equal to  $-50^{\circ}\text{C}$  ( $-58^{\circ}\text{F}$ ) and less than or equal to  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ) using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
- (11) Effective January 1, 2027, self-contained products in data center, information technology equipment facility, and computer room cooling using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
- (12) Industrial process refrigeration products, other than chillers, as follows:
  - (i) Effective January 1, 2026, products with a refrigerant charge capacity of 200 pounds or greater and with the refrigerant temperature entering the evaporator higher than  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ) using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;
  - (ii) Effective January 1, 2026, products with a refrigerant charge capacity less than 200 pounds and with the refrigerant temperature entering the evaporator higher than  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ), using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 300 or greater;
  - (iii) Effective January 1, 2028, where the temperature of the refrigerant entering the evaporator is greater than or equal to  $-50^{\circ}\text{C}$  ( $-58^{\circ}\text{F}$ ) and is less than or equal to  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ), using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
- (13) Motor vehicle air-conditioning as follows:
  - (i) Effective October 24, 2024, for Model Year 2025 and subsequent model year light-duty passenger cars and trucks (vehicles with a gross vehicle weight rating less than 8,500 lb) using or intended to use a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;

- (ii) For Model Year 2028 and subsequent model year medium-duty passenger vehicles, heavy-duty pick-up trucks, and complete heavy-duty vans, as defined by the Federal Highway Administration at 40 CFR 86.1803-01, which have air conditioning equipment that will not be modified by upfitters using or intended to use a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;
  - (iii) Effective January 1, 2028, certain nonroad vehicles (agricultural tractors greater than 40 horsepower; self-propelled agricultural machinery; compact equipment; construction, forestry, and mining equipment; and commercial utility vehicles) using or intended to use a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;
- (14) Effective January 1, 2025, foam products (but not including foam products in paragraph (a)(15) of this section) in the following subsectors using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater:
  - (i) Rigid polyurethane appliance foam, commercial refrigeration foam, laminated boardstock, marine flotation foam, sandwich panels, and slabstock;
  - (ii) Flexible polyurethane;
  - (iii) Integral skin polyurethane;
  - (iv) Polystyrene—extruded boardstock, billet, and extruded sheet;
  - (v) Phenolic insulation board and bunstock;
  - (vi) Polyisocyanurate laminated boardstock;
  - (vii) Polyolefin; and
  - (viii) Rigid polyurethane spray foam (i.e., high-pressure two-component, low-pressure two-component, and one-component foam sealants).
- (15) Effective January 1, 2026, foam products in the formulations specified in paragraphs (a)(14)(i) through (viii) of this section that are for use in space and military applications, except spray and pour foams that are for use in space vehicles as defined in § 84.3, which are not subject to a use restriction.
- (16) Aerosol products as follows:
  - (i) Effective January 1, 2025, all aerosol products using a regulated substance with a global warming potential of 150 or greater, except products that use HFC-43-10mee (1,1,1,2,3,4,4,5,5,5-pentafluoropentane) or HFC-245fa (1,1,1,3,3-pentafluoropropane) as an aerosol solvent or those that use HFC-134a in the following specific uses;
    - (A) Cleaning products for removal of grease, flux and other soils from electrical equipment or electronics;
    - (B) Refrigerant flushes;
    - (C) Products for sensitivity testing of smoke detectors;
    - (D) Lubricants and freeze sprays for electrical equipment or electronics;
    - (E) Sprays for aircraft maintenance;

- (F) Sprays containing corrosion preventive compounds used in the maintenance of aircraft, electrical equipment or electronics, or military equipment;
  - (G) Pesticides for use near electrical wires or in aircraft, in total release insecticide foggers, or in certified organic use pesticides for which EPA has specifically disallowed all other lower-GWP propellants;
  - (H) Mold release agents and mold cleaners;
  - (I) Lubricants and cleaners for spinnerets for synthetic fabrics;
  - (J) Duster sprays specifically for removal of dust from photographic negatives, semiconductor chips, specimens under electron microscopes, and energized electrical equipment;
  - (K) Adhesives and sealants in large canisters;
  - (L) Document preservation sprays;
  - (M) Wound care sprays;
  - (N) Topical coolant sprays for pain relief;
  - (O) Products for removing bandage adhesives from skin.
- (ii) Effective January 1, 2028, all aerosol products using a regulated substance with a global warming potential of 150 or greater.
- (b) Effective three years after the dates listed for each subsector in paragraph (a) of this section, no person may sell, distribute, offer for sale or distribution, make available for sale or distribution, purchase or receive for sale or distribution, or attempt to purchase or receive for sale or distribution, or export any product that uses a regulated substance as listed in paragraph (a).
- (c) No person may install any system, nor have any such system be installed through their position as a designer, owner, or operator of that system, in the following sectors or subsectors that uses a regulated substance as listed in this paragraph (c):
- (1) Effective January 1, 2025, residential or light commercial air-conditioning or heat pump systems using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater, except for variable refrigerant flow air-conditioning and heat pump systems. New residential and light commercial air-conditioning and heat pump systems using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater may be installed prior to January 1, 2026, where all specified components of that system are manufactured or imported prior to January 1, 2025.
  - (2) Effective January 1, 2026, variable refrigerant flow systems for use as residential or light commercial air-conditioning or heat pumps, using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater. Such new variable refrigerant flow systems using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater may be installed prior to January 1, 2027, where all specified components of that system are manufactured or imported prior to January 1, 2026. Such new variable refrigerant flow systems using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater may be installed prior to January 1, 2028, when an approved building permit issued prior to October 5, 2023, specifies the use of a

restricted regulated substance, or blend containing a restricted regulated substance, in such system detailed in that building permit, and where all specified components of that system are manufactured or imported prior to January 1, 2026.

- (3) Effective January 1, 2025, chillers for comfort cooling using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
- (4) Effective January 1, 2025, ice rinks using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
- (5) Effective January 1, 2026, chillers for industrial process refrigeration where the temperature of the fluid exiting the chiller is greater than  $-22^{\circ}\text{F}$  ( $-30^{\circ}\text{C}$ ) using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
- (6) Effective January 1, 2028, chillers for industrial process refrigeration where the temperature of the fluid exiting the chiller is greater than or equal to  $-50^{\circ}\text{C}$  ( $-58^{\circ}\text{F}$ ) and less than or equal to  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ) using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
- (7) Effective January 1, 2025, refrigerated transport—intermodal containers with the temperature of the refrigerant entering the evaporator (for direct heat exchange systems) or the temperature of the fluid exiting (for chillers) of  $-50^{\circ}\text{C}$  ( $-58^{\circ}\text{F}$ ) or higher using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
- (8) Effective January 1, 2025, refrigerated transport—road or refrigerated transport—marine systems using any of the following: R-402A, R-402B, R-404A, R-407B, R-408A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-438A, R-507A, R-125/290/134a/600a (55/1/42.5/1.5), RS-44 (2003 formulation) or GHG-X5;
- (9) Effective January 1, 2026, cold storage warehouse systems as follows:
  - (i) Systems with a refrigerant charge capacity of 200 pounds or greater, that are not the high temperature side of a cascade system, using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;
  - (ii) Systems with a refrigerant charge capacity less than 200 pounds, using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 300 or greater;
  - (iii) Cascade refrigerant systems using a regulated substance, or a blend containing a regulated substance, on the high temperature side of the system with a global warming potential of 300 or greater;
- (10) Industrial process refrigeration systems, other than chiller systems, as follows:
  - (i) Effective January 1, 2026, systems with a refrigerant charge capacity of 200 pounds or greater and with the refrigerant temperature entering the evaporator higher than  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ), that are not the high temperature side of a cascade system, using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;
  - (ii) Effective January 1, 2026, systems with a refrigerant charge capacity less than 200 pounds and with the refrigerant temperature entering the evaporator higher than  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ), using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 300 or greater;

- (iii) Effective January 1, 2026, the high temperature side of cascade systems with the refrigerant temperature entering the evaporator higher than  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ) using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 300 or greater;
  - (iv) Effective January 1, 2028, where the temperature of the refrigerant entering the evaporator is greater than or equal to  $-50^{\circ}\text{C}$  ( $-58^{\circ}\text{F}$ ) and is less than or equal to  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ), using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
- (11) Effective January 1, 2026, remote condensing units in retail food refrigeration systems as follows:
- (i) Systems with a refrigerant charge capacity of 200 pounds or greater, that are not the high temperature side of a cascade system, using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;
  - (ii) Systems with a refrigerant charge capacity less than 200 pounds using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 300 or greater;
  - (iii) Cascade refrigerant systems using a regulated substance, or a blend containing a regulated substance, on the high temperature side of the system with a global warming potential of 300 or greater;
- (12) Effective January 1, 2027, supermarket systems as follows:
- (i) Systems with a refrigerant charge capacity of 200 pounds or greater, that are not the high temperature side of a cascade system, using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 150 or greater;
  - (ii) Systems with a refrigerant charge capacity less than 200 pounds using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 300 or greater;
  - (iii) Cascade refrigerant systems using a regulated substance, or a blend containing a regulated substance, on the high temperature side of the system with a global warming potential of 300 or greater;
- (13) Effective January 1, 2027, data center, information technology equipment facility, and computer room cooling systems using a regulated substance, or a blend containing a regulated substance, with a global warming potential of 700 or greater;
- (14) Effective January 1, 2027, automatic commercial ice machines with a remote condenser using any of the following: R-402A, R-402B, R-404A, R-407B, R-408A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-438A, R-507A, R-125/290/134a/600a (55/1/42.5/1.5), RS-44 (2003 formulation), or GHG-X5.
- (15) Effective January 1, 2027, refrigerated food processing and dispensing equipment with a remote condenser using any of the following: R-402A, R-402B, R-404A, R-407A, R-407B, R-407C, R-407F, R-407H, R-408A, R-410A, R-410B, R-411A, R-411B, R-417A, R-417C, R-420A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-427A, R-428A, R-434A, R-437A, R-438A, R-507A, HFC-134a, HFC-227ea, R-125/290/134a/600a (55/1/42.5/1.5), RB-276, RS-24 (2002 formulation), RS-44 (2003 formulation), GHG-X5, or Freeze 12.

- (d) The compliance date for the installation of a system in paragraph (c) of this section for the industrial process refrigeration systems with a January 1, 2026, compliance date, retail food—supermarket, cold storage warehouse, and ice rink subsectors is extended one year beyond the specified compliance date when an approved building permit issued prior to October 5, 2023, specifies the use of a restricted regulated substance, or blend containing a regulated substance, in a system detailed in that permit.
- (e) The following actions, upon charging the system to full charge, are considered an installation of a refrigeration, air conditioning, and heat pump system under paragraph (c) of this section:
  - (1) Assembling a system for the first time from used or new components;
  - (2) Increasing the cooling capacity, in BTU per hour, of an existing system; or
  - (3) Replacing 75 percent or more of evaporators (by number) and 100 percent of the compressor racks, condensers, and connected evaporator loads of an existing system.
- (f) Effective upon the dates listed for each subsector in paragraphs (a) and (c) of this section, no person may manufacture, import, sell, distribute, offer for sale or distribution, make available for sale or distribution, purchase or receive for sale or distribution, or attempt to purchase or receive for sale or distribution, or export any product or specified component that is not labeled in accordance with § 84.58.
- (g) Every product or system using or intended to use a regulated substance or blend containing a regulated substance that is manufactured, imported, sold, distributed, offered for sale or distribution, made available for sale or distribution, purchased or received for sale or distribution, or attempted to be purchased or received for sale or distribution, or exported in contravention of paragraphs (a) through (f) of this section constitutes a separate violation of this subpart.
- (h) No person may provide false, inaccurate, or misleading information to EPA when reporting or providing any communication required under this subpart.
- (i) No person may falsely indicate through marketing, packaging, labeling, or other means that a product or specified component uses or is intended to use a regulated substance, blend containing a regulated substance, or substitute that differs from the regulated substance, blend containing a regulated substance, or substitute that is actually used.
- (j) Section (k) of the AIM Act states that sections 113, 114, 304, and 307 of the Clean Air Act (42 U.S.C. 7413, 7414, 7604, 7607) shall apply to this section and any rule, rulemaking, or regulation promulgated by the Administrator pursuant to this section as though this section were expressly included in title VI of that Act (42 U.S.C. 7671 *et seq.*). Violation of this part is subject to Federal enforcement and the penalties laid out in section 113 of the Clean Air Act.

[88 FR 73205, Oct. 24, 2023; 88 FR 88832, Dec. 26, 2023, as amended at 89 FR 100392, Dec. 12, 2024]

## § 84.56 Exemptions.

- (a) The regulations under this subpart, including §§ 84.54, 84.58, 84.60, and 84.62, do not apply to:
  - (1) Equipment in existence in the United States prior to December 27, 2020; and
  - (2) Any product using a regulated substance or a blend containing a regulated substance, or intended to use a regulated substance or a blend containing a regulated substance, in an application listed at § 84.13(a), for a year or years for which that application receives an application-specific allowance as defined at § 84.3.

- (b) The prohibitions on the manufacture, import, sale, distribution, offer for sale or distribution, or export of products in § 84.54(a) and (b) do not apply to components that use, or are intended to use, any regulated substance.
- (c) The prohibitions on the sale, distribution, offer for sale or distribution, or export of products in § 84.54(b) do not apply to:
  - (1) Products after a period of ordinary utilization or operation by a consumer; or
  - (2) Products within the disposal or recycling chain.
- (d) The prohibition on the import of used products in § 84.54(a) does not apply to:
  - (1) Systems in use by a conveyance in trade travelling into U.S. jurisdiction including refrigeration, air-conditioning, and heat pump systems in operation aboard ships, planes, motor vehicles, and intermodal containers;
  - (2) Products in the possession of a consumer for personal use; or
  - (3) Products imported solely for recycling or disposal.

### § 84.58 Labeling.

- (a) Effective upon the dates listed for each subsector in § 84.54(a) and (c), any product, specified component, or system manufactured, imported, or installed within the refrigeration, air-conditioning, and heat pump sector using any regulated substance, or blend containing any regulated substance, regardless of global warming potential must have a permanent label compliant with paragraph (d) of this section stating:
  - (1) The chemical name(s) or American Society of Heating, Refrigerating and Air-Conditioning Engineers designation of the regulated substance(s) or blend containing a regulated substance;
  - (2) The full date, or at minimum the four-digit year, of manufacture. For field-charged system installations, this shall be the date of first charge and the label shall be completed at first charge. For MVACs listed in § 84.54(a)(13)(i) and (ii), the model year may be used instead of the date of manufacture.
  - (3) An indication of the full refrigerant charge capacity, either as the specific charge size of the system, or the charge size as it relates to the threshold for the relevant subsector. This means an indication that the charge is either two hundred pounds or more, or less than two hundred pounds, in the following subsectors:
    - (i) Industrial process refrigeration (without chillers);
    - (ii) Retail food refrigeration—supermarket systems;
    - (iii) Retail food refrigeration—remote condensing units; and
    - (iv) Cold storage warehouses.
  - (4) An indication of the charge size of the equipment or the charge size as it relates to the threshold for self-contained refrigerated food processing and dispensing products. This means an indication that the charge is greater than or equal to 500 grams, or less than 500 grams.
  - (5) An indication of the harvest rate, either as the specific harvest rate of the equipment, or the harvest rate as it relates to the threshold for self-contained automatic commercial ice machines, and the type of ice machine (either batch or continuous). This means an indication that that harvest rate is



either greater than 1,000 pounds of ice per day or less than or equal to 1,000 pounds of ice per day for batch type ice makers, and an indication that the harvest rate is either greater than 1,200 pounds of ice per day or less than or equal to 1,200 pounds of ice per day for continuous type ice makers.

- (6) An indication of the designed exiting fluid temperature range for industrial process refrigeration chillers and the designed refrigerant temperature range when it enters the evaporator for industrial process refrigeration systems without chillers.
- (b) Effective upon the date listed for each subsector in § 84.54(c), or the earliest date should the specified component be used in multiple subsectors, any specified component manufactured or imported and intended for use in those subsectors that uses or is intended to use any regulated substance, or blend containing any regulated substance, regardless of global warming potential, must have a permanent label compliant with paragraph (c) of this section containing the information in paragraph (a)(1) of this section. For specified components that are intended for use with a regulated substance or blends containing a regulated substance that exceed the applicable GWP limit or HFC restriction, the label must state "For servicing existing equipment only" in addition to the other required labeling elements.
- (c) Effective upon the dates listed for each subsector in § 84.54(a) and (c), any product manufactured, imported, or installed within the foam or aerosol sectors using any regulated substance, or blend containing any regulated substance, regardless of global warming potential, must have a permanent label compliant with paragraph (d) of this section stating:
  - (1) The chemical name(s) or American Society of Heating, Refrigerating and Air-Conditioning Engineers designation of any regulated substance(s) or blend containing a regulated substance used;
  - (2) If an HFC with a GWP higher than the limit is used or if multiple HFCs are used, either the weights of the HFC(s) relative to the other blowing agents, propellants, solvents, or to the other HFCs must be on the label, or the label must state "GWP<150."
  - (3) The full date, or at minimum the four-digit year, of manufacture.
- (d) The permanent label must be:
  - (1) In English;
  - (2) Durable and printed or otherwise labeled on, or affixed to, an external surface of the product;
  - (3) Readily visible and legible;
  - (4) Able to withstand open weather exposure without a substantial reduction in visibility or legibility, if applicable; and
  - (5) Displayed on a background of contrasting color.
- (e) The requirements of this section may be met through the use of existing labels required under other authorities that contain the necessary information. The labeling requirements may also be met by providing the required information in packaging materials or through an on-product QR code. The packaging must be present with the product or specified component at the point of sale and import. The QR code must direct to the required information and meet all the requirements of the on-product label. The QR code must be functional and include adjacent text to indicate the purpose of the QR code.

- (f) For products sold or distributed, offered for sale or distribution, or made available electronically through online commerce, the label must be readily visible and legible in either photographs of the products, photographs of packaging materials that contain the required information, or an item description that contains the required information.
- (g) Any product or system, using a regulated substance manufactured, imported, or installed after the compliance date for that sector or subsector, that lacks a label will be presumed to use a regulated substance with a global warming potential that exceeds the limit or is specifically listed in § 84.54(a) or (c).

## § 84.60 Reporting and recordkeeping.

### (a) *Reporting.*

- (1) Effective January 1, 2025, any person who imports or manufactures a product or specified component within a sector or subsector listed in § 84.54 that uses or is intended to use a regulated substance or blend containing a regulated substance must comply with the following reporting and recordkeeping requirements:
  - (i) Reports must be submitted annually to EPA within 90 days of the end of the reporting period;
  - (ii) Reports must be submitted electronically in a format specified by EPA;
  - (iii) Each report shall be signed and attested;
- (2) Each report must include:
  - (i) The reporting entity's name, address, contact person, email address, and phone number of the contact person;
  - (ii) The year covered under the report and the date of submittal;
  - (iii) All applicable NAICS code(s); and
  - (iv) A statement of certification that the data are accurate and that the products use regulated substances, or blends containing regulated substances, that meet the requirements of § 84.54, and are labeled in accordance with § 84.58.
- (3) Reports for products and specified components in the refrigeration, air-conditioning, and heat pump sector must also include the following information:
  - (i) For each set of products or specified components with the same combination of charge size and regulated substance(s), the report must specify the subsector of the product or specified component based on the categorization in § 84.54; the identity of the regulated substance or blend containing a regulated substance, the charge size (including holding charge or no charge, if applicable), and the number of units imported, manufactured, and exported;
  - (ii) For products and specified components that include closed-cell foam containing a regulated substance, the report must include the identity of the regulated substance(s) in the foam, the mass of the regulated substance(s) in the foam, and the number of products manufactured, imported, or exported with the same combination of mass and identity of regulated substance(s) within the closed-cell foam.

- (iii) Total mass in metric tons of each regulated substance or blend containing a regulated substance contained in all products or specified components manufactured, imported, and exported annually.
- (4) Reports for products in the foam sector must also include the following information:
  - (i) For containers or foam blowing products that contain foam blowing agent and are intended for use to blow foam, the report must specify the subsector of the product based on the categorization in § 84.54, the identity of the regulated substance(s) contained in the product, the mass of the regulated substance(s) used, and the number of units manufactured, imported, or exported.
  - (ii) For each set of products, other than containers described in paragraph (a)(4)(i) of this section, with the same combination of density and identity of regulated substance(s), the report must specify the subsector of the product based on the categorization in § 84.54, the identity of the regulated substance(s) contained in the foam, the volume of foam, and the number of units manufactured, imported, or exported; and
  - (iii) Total mass in metric tons of each regulated substance contained in all products manufactured, imported, and exported annually.
- (5) Reports for products in the aerosol sector must also include the following information:
  - (i) For each set of products with the same combination of regulated substance(s) and quantity of regulated substance(s), the report must specify the subsector of the product based on the categorization in § 84.54, the identity of the regulated substance(s), their percentages if more than one regulated substance is used, and the number of units manufactured, imported, or exported; and
  - (ii) Total mass in metric tons of each regulated substance contained in all products manufactured, imported, and exported annually.
- (6) Any failure by a domestic manufacturer or importer of a product or specified component that uses or is intended to use a regulated substance or a blend containing a regulated substance to report required information or provide accurate information pursuant to this section shall be considered a violation of this section.

(b) **Recordkeeping.**

- (1) Each domestic manufacturer or importer of a product or specified component within a sector or subsector listed in § 84.54 that uses or is intended to use a regulated substance or blend containing a regulated substance must retain the following records for a minimum of three years from the date of creation of the record and must make them available to EPA upon request:
  - (i) Records that form the basis of the reports required in paragraph (a) of this section; and
  - (ii) The entity to whom the product or specified component using a regulated substance were sold, distributed, or in any way conveyed to.
- (2) In addition to the records in paragraph (b)(1) of this section, importers of products and specified components using or intended to use a regulated substance or a blend containing a regulated substance must retain the following records for each import for a minimum of three years from the date of creation of the record and must make them available to EPA upon request:

- (i) A copy of the bill of lading;
- (ii) The invoice;
- (iii) The U.S. Customs and Border Protection entry documentation;
- (iv) Port of entry;
- (v) Country of origin and the country of shipment to the United States.

#### **§ 84.62 Technology transitions petition requirements.**

- (a) Each petition sent to the Administrator under subsection (i) of the AIM Act shall include the following elements:
  - (1) The sector and subsector(s) for which restrictions on use of the regulated substance would apply.
  - (2) For each sector and subsector identified in a petition, the restriction on the use of a regulated substance through any of the following:
    - (i) A global warming potential limit that will apply to regulated substances or blends containing regulated substances with global warming potentials at or above that limit;
    - (ii) Identification of the regulated substance(s) or blend(s) containing a regulated substance to be restricted and its global warming potential according to § 84.64; or
    - (iii) Another form of restriction with an explanation for why a restriction under paragraph (a)(2)(i) or (ii) of this section would not be appropriate.
  - (3) For each restriction on the use of a regulated substance contained in a petition, the effective date on which the regulated substance use restriction would commence and information supporting the identified effective date.
  - (4) Address whether the Administrator negotiate with stakeholders in accordance with the negotiated rulemaking procedure provided for under subchapter III of chapter 5 of title 5, United States Code, including an explanation of their position to support or oppose the use of the negotiated rulemaking procedure.
  - (5) For each requested restriction, to the extent practicable, information related to the considerations provided in subsection (i)(4) of 42 U.S.C. 7675 to facilitate the Agency's review of the petition.
- (b) Any petition submitted to the Administrator must be submitted electronically using the methods prescribed by the Administrator.

#### **§ 84.64 Global warming potentials.**

- (a) The global warming potential of a regulated substance is the exchange value for the regulated substance listed in subsection (c) of the AIM Act and in appendix A to this part 84.

- (b) For blends containing a regulated substance, the global warming potential of the blend is the sum of the global warming potentials of each constituent of the blend multiplied by the nominal mass fraction of that constituent within the blend. The global warming potential of each constituent shall be as follows:

**TABLE 1 TO PARAGRAPH (b)**

Substance name	100-Year global warming potential
2-chloropropane	1
Acetone	0.5
Acetone/isopentane blend	1
Dimethyl ether	1
Formic acid	5
HCFO-1224yd(Z)	1
HCFO-1233yd(Z)	1
HCFO-1233zd(E)	4
HCO-1130(E)	5
HFE-347pcf2	987
HFE-449s1 (HFE-7100)	297
HFE-569sf2	59
HFO-1234yf	1
HFO-1234ze(E)	1
HFO-1336mzz(E)	26
HFO-1336mzz(Z)	2
Hydrocarbons (C5-C20)	1-2.7
Methoxytridecafluoroheptane (MPHE) isomers	2.5
Methyl formate	13
Methylal (dimethoxymethane)	1
Oxygenated organic solvents (esters, ethers, alcohols, ketones)	1-13
R-170 (ethane)	5.5
R-290 (propane)	3.3
R-600 (butane)	4
R-600a (isobutane)	1
R-717 (ammonia)	1
R-744 (carbon dioxide)	1
R-1150 (ethylene)	3.7
R-1270 (propylene)	1.8

Substance name	100-Year global warming potential
Saturated light hydrocarbons (C3-C6)	1-4

- (c) For constituents of a blend containing a regulated substance that do not have a global warming potential as provided in paragraph (b) of this section, the constituent and its nominal mass fraction in the blend shall be excluded from the calculation in paragraph (b).

Subpart C—Management of Regulated Substances

Source: 89 FR 82859, Oct. 11, 2024, unless otherwise noted.

§ 84.100 Purpose.

The purpose of the regulations in this subpart is to implement subsection (h) of 42 U.S.C. 7675, including with respect to establishing requirements to control practices, processes, or activities regarding the servicing, repair, disposal, or installation of equipment, for purposes of maximizing reclaiming, minimizing the release of regulated substances from equipment, and ensuring the safety of technicians and consumers.

§ 84.102 Definitions.

For the terms not defined in this subpart but that are defined in § 84.3, the definitions in § 84.3 shall apply. For the purposes of this subpart C:

- Certified technician** means a technician that has been certified per the provisions at 40 CFR 82.161.
- Comfort cooling** means the refrigerant-containing appliances used for air conditioning to provide cooling in order to control heat and/or humidity in occupied facilities including but not limited to residential, office, and commercial buildings. Comfort cooling appliances include but are not limited to chillers, commercial split systems, dual-function heat pumps, and packaged roof-top units.
- Commercial refrigeration** means the refrigerant-containing appliances used in the retail food and cold storage warehouse subsectors. Retail food appliances include the refrigerant-containing appliances found in supermarkets, convenience stores, restaurants, and other food service establishments. Cold storage includes the refrigerant-containing appliances used to store meat, produce, dairy products, and other perishable goods.
- Component**, as it relates to a refrigerant-containing appliance, means a part of the refrigerant circuit within an appliance including but not limited to compressors, condensers, evaporators, receivers, and all of its connections and subassemblies.
- Custom-built** means that the industrial process refrigeration equipment or any of its components cannot be purchased and/or installed without being uniquely designed, fabricated and/or assembled to satisfy a specific set of industrial process conditions.

**Disposal**, as it relates to refrigerant-containing equipment, means the process leading to and including:

- (1) The discharge, deposit, dumping, or placing of any discarded refrigerant-containing equipment into or on any land or water;
- (2) The disassembly of any refrigerant-containing equipment for discharge, deposit, dumping, or placing of its discarded component parts into or on any land or water;
- (3) The vandalism of any refrigerant-containing equipment such that the refrigerant is released into the environment or would be released into the environment if it had not been recovered prior to the destructive activity;
- (4) The disassembly of any refrigerant-containing equipment for reuse of its component parts; or
- (5) The recycling of any refrigerant-containing equipment for scrap.

**Disposal**, as it relates to fire suppression equipment, means the process leading to and including:

- (1) The discharge, deposit, dumping, or placing of any fire suppression equipment into or on any land or water;
- (2) The disassembly of any fire suppression equipment for discharge, deposit, dumping, or placing of its discarded component parts into or on any land or water; or
- (3) The disassembly of any fire suppression equipment for reuse of its component parts.

**Equipment** means any device that contains, uses, detects, or is otherwise connected to or associated with a regulated substance or substitute for a regulated substance, including any component, system, refrigerant-containing appliance, and fire suppression equipment.

**Fire suppression equipment** means any device that is connected to or associated with a regulated substance or substitute for a regulated substance, including blends and mixtures, consisting in part or whole of a regulated substance or a substitute for a regulated substance, and that is used for fire suppression purposes. This term includes any such equipment, component, or system. This term does not include military equipment used in deployable and expeditionary situations. This term also does not include space vehicles as defined in 40 CFR 84.3.

**Fire suppression technician** means any person who in the course of servicing, repair, disposal, or installation of fire suppression equipment could be reasonably expected to violate the integrity of the fire suppression equipment and therefore release fire suppressants into the environment.

**Follow-up verification test**, as it relates to a refrigerant-containing appliance, means those tests that involve checking the repairs to an appliance after a successful initial verification test and after the appliance has returned to normal operating characteristics and conditions to verify that the repairs were successful. Potential methods for follow-up verification tests include but are not limited to the use of soap bubbles as appropriate, electronic or ultrasonic leak detectors, pressure or vacuum tests, fluorescent dye and black light, infrared or near infrared tests, and handheld gas detection devices.

**Full charge**, as it relates to a refrigerant-containing appliance, means the amount of refrigerant required for normal operating characteristics and conditions of the appliance as determined by using one or a combination of the following four methods:

- (1) Use of the equipment manufacturer's determination of the full charge;

- (2) Use of appropriate calculations based on component sizes, density of refrigerant, volume of piping, and other relevant considerations;
- (3) Use of actual measurements of the amount of refrigerant added to or evacuated from the appliance, including for seasonal variances; and/or
- (4) Use of an established range based on the best available data regarding the normal operating characteristics and conditions for the appliance, where the midpoint of the range will serve as the full charge.

**Industrial process refrigeration** means complex customized refrigerant-containing appliances that are directly linked to the processes used in, for example, the chemical, pharmaceutical, petrochemical, and manufacturing industries. This sector also 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.

**Initial verification test**, as it relates to a refrigerant-containing appliance, means those leak tests that are conducted after the repair is finished to verify that a leak or leaks have been repaired before refrigerant is added back to the appliance.

**Installation** means the process of setting up equipment for use, which may include steps such as completing the refrigerant circuit, including charging equipment with a regulated substance or substitute for a regulated substance, or connecting cylinders containing a regulated substance or a substitute for a regulated substance to a total flooding fire suppression system, such that the equipment can function and is ready for use for its intended purpose.

**Leak inspection**, as it relates to a refrigerant-containing appliance, means the examination of an appliance to detect and determine the location of refrigerant leaks. Potential methods include but are not limited to ultrasonic tests, gas-imaging cameras, bubble tests as appropriate, or the use of a leak detection device operated and maintained according to manufacturer guidelines. Methods that determine whether the appliance is leaking refrigerant but not the location of a leak, such as standing pressure/vacuum decay tests, sight glass checks, viewing receiver levels, pressure checks, and charging charts, must be used in conjunction with methods that can determine the location of a leak.

**Leak rate**, as it relates to a refrigerant-containing appliance, means the rate at which an appliance is losing refrigerant, measured between refrigerant charges. The leak rate is expressed in terms of the percentage of the appliance's full charge that would be lost over a 12-month period if the current rate of loss were to continue over that period. The rate must be calculated using one of the following methods. The same method must be used for all appliances subject to the leak repair requirements located at an operating facility.

(1) **Annualizing Method** –

- (i) **Step 1.** Take the number of pounds of refrigerant added to the appliance to return it to a full charge, whether in one addition or in multiple additions related to same leak, and divide it by the number of pounds of refrigerant the appliance normally contains at full charge;
- (ii) **Step 2.** Take the shorter of the number of days that have passed since the last day refrigerant was added or 365 days and divide that number by 365 days;
- (iii) **Step 3.** Take the number calculated in Step 1 and divide it by the number calculated in Step 2; and



- (iv) **Step 4.** Multiply the number calculated in Step 3 by 100 to calculate a percentage. This method is summarized in the following formula:

### Formula 1 to paragraph (1)(iv)

$$\text{Leak rate (\% per year)} = \frac{\text{pounds of refrigerant added}}{\text{pounds of refrigerant in full charge}} \times \frac{365 \text{ days/year}}{\text{shorter of: \# days since refrigerant last added or 365 days}} \times 100\%$$

#### (2) Rolling Average Method –

- (i) **Step 1.** Take the sum of the pounds of refrigerant added to the appliance over the previous 365-day period (or over the period that has passed since the last successful follow-up verification test showing all identified leaks in the appliance were repaired, if that period is less than one year);
- (ii) **Step 2.** Divide the result of Step 1 by the pounds of refrigerant the appliance normally contains at full charge; and
- (iii) **Step 3.** Multiply the result of Step 2 by 100 to obtain a percentage. This method is summarized in the following formula:

### Formula 2 to paragraph (2)(iii)

$$\text{Leak rate (\% per year)} = \frac{\begin{array}{c} \text{pounds of refrigerant added over past 365 days} \\ \text{(or since the last successful follow-up verification test showing all identified} \\ \text{leaks in the appliance were repaired, if that period is less than one year)} \end{array}}{\text{pounds of refrigerant in full charge}} \times 100\%$$

**Mothball**, as it relates to a refrigerant-containing appliance, means to evacuate refrigerant from an appliance, or the affected isolated section or component of an appliance, to at least atmospheric pressure, and to temporarily shut down that appliance.

**Motor vehicle** means any vehicle which is self-propelled and designed for transporting persons or property on a street or highway, including but not limited to passenger cars, light-duty vehicles, and heavy-duty vehicles. This definition does not include a vehicle where final assembly of the vehicle has not been completed by the original equipment manufacturer.

**Motor vehicle air conditioners (MVAC)** means mechanical vapor compression refrigerant-containing appliances used to cool the driver's or passenger's compartment of any motor vehicle. This definition is intended to have the same meaning as in 40 CFR 82.32.

**MVAC-like appliance** means a mechanical vapor compression, open-drive compressor refrigerant-containing appliance with a full charge of 20 pounds or less of refrigerant used to cool the driver's or passenger's compartment of off-road vehicles. This includes, but is not limited to, the air-conditioning appliances found on agricultural or construction vehicles. This definition is intended to have the same meaning as in 40 CFR 82.152.

**Normal operating characteristics and conditions**, as it relates to a refrigerant-containing appliance, means appliance operating temperatures, pressures, fluid flows, speeds, and other characteristics, including full charge of the appliance, that would be expected for a given process load and ambient condition during normal operation. Normal operating characteristics and conditions are marked by the absence of atypical conditions affecting the operation of the appliance.

**Owner or operator** means any person who owns, leases, operates, or controls any equipment, or who controls or supervises any practice, process, or activity that is subject to any requirement pursuant to this subpart.

**Recover** means the process by which a regulated substance, or where applicable, a substitute for a regulated substance, is

- (1) removed, in any condition, from equipment and
- (2) stored in an external container, with or without testing or processing the regulated substance or substitute for a regulated substance.

**Recycling**, when referring to fire suppression or fire suppressants, means the testing and/or reprocessing of regulated substances used in the fire suppression sector to certain purity standards.

**Refrigerant** means any substance, including blends and mixtures, consisting in part or whole of a regulated substance or a substitute for a regulated substance that is used for heat transfer purposes and provides a cooling effect.

**Refrigerant circuit**, as it relates to a refrigerant-containing appliance, means the parts of an appliance that are normally connected to each other (or are separated only by internal valves) and are designed to contain refrigerant.

**Refrigerant-containing appliance** means any device that contains and uses a regulated substance or substitute for a regulated substance as a refrigerant including but not limited to any air conditioner, MVAC, MVAC-like appliance, refrigerator, chiller, or freezer. For such devices with multiple circuits, each independent circuit is considered a separate appliance.

**Refrigerant-containing equipment** means equipment as defined in this subpart that contains, uses, or is otherwise connected to or associated with a regulated substance or substitute for a regulated substance that is used as a refrigerant. This definition includes refrigerant-containing components and refrigerant-containing appliances. This term does not include military equipment used in deployable and expeditionary situations. This term also does not include space vehicles as defined in 40 CFR 84.3.

**Repackager** means an entity that transfers regulated substances, either alone or in a blend, from one container to another container prior to sale or distribution or offer for sale or distribution. An entity that services system cylinders for use in fire suppression equipment and returns the same regulated substances to the same system cylinder it was recovered from after the system cylinder is serviced is not a repackager.

**Repair**, as it relates to a particular leak in a refrigerant-containing appliance, means making adjustments or other alterations to that refrigerant-containing appliance that have the effect of stopping leakage of refrigerant from that particular leak.

**Reprocess** means using procedures such as filtering, drying, distillation, and other chemical procedures to remove impurities from a regulated substance or a substitute for a regulated substance.

**Retire**, as it relates to a refrigerant-containing appliance, means the removal of the refrigerant and the disassembly or impairment of the refrigerant circuit such that the appliance as a whole is rendered unusable by any person in the future.

**Retrofit**, as it relates to a refrigerant-containing appliance, means to convert an appliance from one refrigerant to another refrigerant. Retrofitting includes the conversion of the appliance to achieve system compatibility with the new refrigerant and may include, but is not limited to, changes in lubricants, gaskets, filters, driers, valves, o-rings, or appliance components.

**Seasonal variance**, as it relates to a refrigerant-containing appliance, means the removal of refrigerant from an appliance due to a change in ambient conditions caused by a change in season, followed by the subsequent addition of an amount that is less than or equal to the amount of refrigerant removed in the prior change in season, where both the removal and addition of refrigerant occurs within one consecutive 12-month period.

**Stationary refrigerant-containing equipment** means refrigerant-containing equipment, as defined in this subpart, that is not an MVAC or an MVAC-like appliance, as defined in this subpart.

**Substitute for a regulated substance** means a substance that can be used in equipment in the same or similar applications as a regulated substance, to serve the same or a similar purpose, including but not limited to a substance used as a refrigerant in a refrigerant-containing appliance or as a fire suppressant in fire suppression equipment, provided that the substance is not a regulated substance or an ozone-depleting substance.

**Technician**, as it relates to any person who works with refrigerant-containing appliances, means any person who in the course of servicing, repair, or installation of a refrigerant-containing appliance (except MVACs) could be reasonably expected to violate the integrity of the refrigerant circuit and therefore release refrigerants into the environment. Technician also means any person who in the course of disposal of a refrigerant-containing appliance (except small appliances as defined in 40 CFR 82.152, MVACs, and MVAC-like appliances) could be reasonably expected to violate the integrity of the refrigerant circuit and therefore release refrigerants from the appliances into the environment. Activities reasonably expected to violate the integrity of the refrigerant circuit include but are not limited to: Attaching or detaching hoses and gauges to and from the appliance; adding or removing refrigerant; adding or removing components; and cutting the refrigerant line. Activities such as painting the appliance, rewiring an external electrical circuit, replacing insulation on a length of pipe, or tightening nuts and bolts are not reasonably expected to violate the integrity of the refrigerant circuit. Activities conducted on refrigerant-containing appliances that have been properly evacuated pursuant to 40 CFR 82.156 are not reasonably expected to release refrigerants unless the activity includes adding refrigerant to the appliance. Technicians could include but are not limited to installers, contractor employees, in-house service personnel, and owners and/or operators of refrigerant-containing appliances.

**Virgin regulated substance** means any regulated substance that has not had any bona fide use in equipment.

## § 84.104 Prohibitions.

- (a) **Sale of recovered refrigerant.** No person may sell, distribute, or transfer to a new owner, or offer for sale, distribution, or transfer to a new owner, any regulated substance used as a refrigerant in stationary refrigerant-containing equipment consisting in whole or in part of recovered regulated substances, unless the recovered regulated substance:
  - (1) Has been reclaimed by a person who has been certified as a reclaimer under 40 CFR 82.164 and has been reclaimed by being reprocessed to all of the specifications in appendix A to 40 CFR part 82, subpart F that are applicable to that regulated substance and verified to meet these specifications using the analytical methodology prescribed in section 5 of appendix A to 40 CFR part 82, subpart F; or

- (2) Is sold, distributed, or transferred to a new owner, or offered for sale, distribution, or transfer to a new owner solely for the purposes of being reclaimed or destroyed.

(b) [Reserved]

### § 84.106 Leak repair.

- (a) **Applicability.** This section applies to refrigerant-containing appliances with a full charge of 15 or more pounds of refrigerant where the refrigerant contains:
  - (1) A regulated substance,
  - (2) A substitute for a regulated substance that has a global warming potential greater than 53, based on the global warming potentials listed in table 1 of § 84.64(b).
  - (3) Notwithstanding the criteria in paragraphs (a)(1) and (2) of this section, the requirements of this section do not apply to:
    - (i) Appliances (as defined in 40 CFR 82.152) containing solely an ozone-depleting substance as listed in 40 CFR part 82, subpart A as a refrigerant;
    - (ii) Refrigerant-containing appliances used for the residential and light commercial air conditioning and heat pump subsector.
  - (4) The requirements of this section apply as of January 1, 2026.
- (b) **Leak rate calculation.** Persons adding or removing refrigerant from a refrigerant-containing appliance must, upon conclusion of that installation, service, repair, or disposal, provide the owner or operator with documentation that meets the applicable requirements of paragraph (l)(2) of this section. The owner or operator must calculate the leak rate every time refrigerant is added to an appliance unless the addition is made immediately following a retrofit, installation of a new refrigerant-containing appliance, or qualifies as a seasonal variance.
  - (1) Where an owner or operator is using the annualizing method to calculate a leak rate for a refrigerant-containing appliance for the first time after January 1, 2026, the calculation should substitute 365 days as the number of days since last refrigerant addition.
  - (2) Where an owner or operator is using the rolling average method to calculate a leak rate for a refrigerant-containing appliance for the first time after January 1, 2026, the calculation should substitute pounds of refrigerant added since January 1, 2026.
  - (3) An owner or operator may switch to a different leak rate calculation methodology only if the following requirements are met:
    - (i) The owner or operator has purchased or otherwise acquired an operating facility with one or more refrigerant-containing appliance(s) which was previously using a different leak rate calculation methodology than the methodology being used at other facilities owned or operated by the owner or operator;
    - (ii) The owner or operator has determined the refrigerant-containing appliance(s) at any operating facility for which the leak rate calculation methodology would change are not exceeding the applicable leak rate in paragraph (c)(2) of this section under either of the leak rate calculation methodologies ; and

- (iii) The owner or operator must retain a record of this change as described in paragraph (l)(3) of this section.

(c) **Requirement to address leaks through repair, or retrofitting or retiring a refrigerant-containing appliance.**

- (1) Owners or operators must repair leaks in refrigerant-containing appliances with a leak rate over the applicable leak rate in this paragraph in accordance with paragraphs (d) through (f) of this section unless the owner or operator elects to retrofit or retire the refrigerant-containing appliance in compliance with paragraphs (h) and (i) of this section. If the owner or operator elects to repair leaks but fails to bring the leak rate below the applicable leak rate, the owner or operator must create and implement a retrofit or retirement plan in accordance with paragraphs (h) and (i) of this section. Repairs must be conducted by a certified technician, as defined in this subpart.

(2) Leak rates:

- (i) 20 percent leak rate for commercial refrigeration appliances;
- (ii) 30 percent leak rate for industrial process refrigeration appliances; and
- (iii) 10 percent leak rate for comfort cooling appliances, refrigerated transport appliances, or other refrigerant-containing appliances with a full charge of 15 or more pounds of refrigerant not covered by paragraph (c)(2)(i) or (ii) of this section.

(d) **Appliance repair.** Owners or operators must identify and repair leaks in accordance with this paragraph within 30 days (or 120 days if an industrial process shutdown is required) of when refrigerant is added to a refrigerant-containing appliance exceeding the applicable leak rate in paragraph (c) of this section.

- (1) A certified technician must conduct a leak inspection, as described in paragraph (g) of this section, to identify the location of leaks.
- (2) Leaks must be repaired such that the leak rate of the refrigerant-containing appliance is brought below the applicable leak rate. This must be confirmed by the leak rate calculation performed upon the next refrigerant addition. Leak repairs will be presumed to be successful if, over the 12-month period after the date of a successful follow-up verification test, there is no further refrigerant addition or if the leak inspections required under paragraph (g) and/or automatic leak detection systems required by § 84.108 do not find any leaks in the appliance. Repairs of leaks must be documented by both an initial and a follow-up verification test or tests.
- (3) The time frames in paragraphs (d) through (f) of this section are temporarily suspended when an appliance is mothballed. The time will resume on the day additional refrigerant is added to the refrigerant-containing appliance (or component of a refrigerant-containing appliance if the leaking component was isolated).

(e) **Verification tests.** The owner or operator must conduct both initial and follow-up verification tests on each leak that was repaired under paragraph (d) of this section.

- (1) **Initial verification test.** Unless granted additional time, an initial verification test must be performed within 30 days (or 120 days if an industrial process shutdown is required) of a refrigerant-containing appliance exceeding the applicable leak rate in paragraph (c) of this section. An initial verification test must demonstrate that for leaks where repair attempts were made, the adjustments or alterations to the refrigerant-containing appliance have held.

- (i) For repairs that can be completed without the need to open or evacuate the refrigerant-containing appliance, the test must be performed after the conclusion of the repairs and before any additional refrigerant is added to the refrigerant-containing appliance.
- (ii) For repairs that require the evacuation of the refrigerant-containing appliance or portion of the refrigerant-containing appliance, the test must be performed before adding any refrigerant to the refrigerant-containing appliance.
- (iii) If the initial verification test indicates that the repairs have not been successful, the owner or operator may conduct as many additional repairs and initial verification tests as needed within the applicable time period.

(2) **Follow-up verification test.** A follow-up verification test must be performed within 10 days of the successful initial verification test or 10 days of the refrigerant-containing appliance reaching normal operating characteristics and conditions (if the refrigerant-containing appliance or isolated component was evacuated for the repair(s)). Where it is unsafe to be present or otherwise impossible to conduct a follow-up verification test when the system is operating at normal operating characteristics and conditions, the verification test must, where practicable, be conducted prior to the system returning to normal operating characteristics and conditions.

- (i) A follow-up verification test must demonstrate that leaks where repair attempts were made are repaired. If the follow-up verification test indicates that the repairs have not been successful, the owner or operator may conduct as many additional repairs and verification tests as needed to bring the refrigerant-containing appliance below the leak rate within the applicable time period and to verify the repairs.

(ii) [Reserved]

(f) **Extensions to the appliance repair deadlines.** Owners or operators are permitted more than 30 days (or 120 days if an industrial process shutdown is required) to comply with paragraphs (d) and (e) of this section if they meet the requirements of paragraphs (f)(1) through (4) of this section or the refrigerant-containing appliance is mothballed. Extension requests must be signed by an authorized company official. The request will be considered approved unless EPA notifies the owners or operators otherwise.

(1) One or more of the following conditions must apply:

- (i) The refrigerant-containing appliance is located in an area subject to radiological contamination or shutting down the refrigerant-containing appliance will directly lead to radiological contamination. Additional time is permitted to the extent needed to conduct and finish repairs in a safe working environment.
- (ii) Requirements of other applicable Federal, State, local, or Tribal regulations make repairs within 30 days (or 120 days if an industrial process shutdown is required) impossible. Additional time is permitted to the extent needed to comply with the pertinent regulations.
- (iii) Components that must be replaced are not available within 30 days (or 120 days if an industrial process shutdown is required). Additional time is permitted up to 30 days after receiving delivery of the necessary components, not to exceed 180 days (or 270 days if an industrial process shutdown is required) from the date the refrigerant-containing appliance exceeded the applicable leak rate.

- (2) Repairs to leaks that the technician has identified as significantly contributing to the exceedance of the leak rate and that do not require additional time must be completed and verified within the initial 30-day repair period (or 120-day repair period if an industrial process shutdown is required);
- (3) The owner or operator must document all repair efforts and the reason for the inability to make all necessary repairs within the initial 30-day repair period (or 120-day repair period if an industrial process shutdown is required); and
- (4) The owner or operator must request an extension from EPA electronically, using the Agency's applicable reporting platform, within 30 days (or 120 days if an industrial process shutdown is required) of the refrigerant-containing appliance exceeding the applicable leak rate in paragraph (c) of this section. Extension requests must include: Identification and address of the facility; the name of the owner or operator of the refrigerant-containing appliance; the leak rate; the method used to determine the leak rate and full charge; the date the refrigerant-containing appliance exceeded the applicable leak rate; the location of leak(s) to the extent determined to date; any repairs that have been performed thus far, including the date that repairs were completed; the reasons why more than 30 days (or 120 days if an industrial process shutdown is required) are needed to complete the repairs; an estimate of when the repairs will be completed; and a signature from an authorized company official. If the estimated completion date is to be extended, a new estimated date of completion and documentation of the reason for that change must be submitted to EPA within 30 days of identifying that the completion date must be extended. The owner or operator must keep a dated copy of these submissions.

(g) *Leak inspections.*

- (1) The owner or operator must conduct a leak inspection in accordance with the following schedule on any refrigerant-containing appliance exceeding the applicable leak rate in paragraph (c)(2) of this section.
  - (i) For commercial refrigeration and industrial process refrigeration appliances with a full charge of 500 or more pounds, leak inspections must be conducted once every three months after the date of a successful follow-up verification test, until the owner or operator can demonstrate through the leak rate calculations required under paragraph (b) of this section that the appliance has not leaked in excess of the applicable leak rate for four quarters in a row.
  - (ii) For commercial refrigeration and industrial process refrigeration appliances with a full charge of 15 or more pounds but less than 500 pounds, leak inspections must be conducted once per year after the date of a successful follow-up verification test, until the owner or operator can demonstrate through the leak rate calculations required under paragraph (b) of this section that the appliance has not leaked in excess of the applicable leak rate for one year.
  - (iii) For comfort cooling appliances and other appliances not covered by paragraphs (g)(1)(i) and (ii) of this section, leak inspections must be conducted once per year after the date of a successful follow-up verification test, until the owner or operator can demonstrate through the leak rate calculations required under paragraph (b) of this section that the appliance has not leaked in excess of the applicable leak rate for one year.
- (2) Leak inspections must be conducted by a certified technician using method(s) determined by the certified technician to be appropriate for that refrigerant-containing appliance.
- (3) All visible and accessible components of a refrigerant-containing appliance must be inspected, with the following exceptions:

- (i) Where components are insulated, under ice that forms on the outside of equipment, underground, behind walls, or are otherwise inaccessible;
  - (ii) Where personnel must be elevated more than two meters above a support surface; or
  - (iii) Where components are unsafe to inspect, as determined by site personnel.
- (4) Quarterly or annual leak inspections are not required on refrigerant-containing appliances, or portions of refrigerant-containing appliances, continuously monitored by an automatic leak detection system that is audited or calibrated annually. An automatic leak detection system may directly detect refrigerant in air, monitor its surrounding in a manner other than detecting refrigerant concentrations in air, or monitor conditions of the appliance. An automatic leak detection system being used for this purpose must meet the requirements for automatic leak detection systems in § 84.108(c) through (g) and § 84.108(i).
- (i) When an automatic leak detection system is only being used to monitor portions of a refrigerant-containing appliance, the remainder of the refrigerant-containing appliance continues to be subject to any applicable leak inspection requirements.
  - (ii) [Reserved]

(h) ***Retrofit or retirement plans.***

- (1) The owner or operator must create a retrofit or retirement plan within 30 days of:
- (i) A refrigerant-containing appliance leaking above the applicable leak rate in paragraph (c) of this section if the owner or operator intends to retrofit or retire rather than repair leaks;
  - (ii) A refrigerant-containing appliance leaking above the applicable leak rate in paragraph (c) of this section if the owner or operator fails to take any action to identify or repair leaks; or
  - (iii) A refrigerant-containing appliance continues to leak above the applicable leak rate after having conducted the required repairs and verification tests under paragraphs (d) and (e) of this section.
- (2) A retrofit or retirement plan must, at a minimum, contain the following information:
- (i) Identification and location of the refrigerant-containing appliance;
  - (ii) Type and full charge of the refrigerant used in the refrigerant-containing appliance;
  - (iii) Type and full charge of the refrigerant to which the refrigerant-containing appliance will be converted, if retrofitted;
  - (iv) Itemized procedure for converting the refrigerant-containing appliance to a different refrigerant, including changes required for compatibility with the new refrigerant, if retrofitted;
  - (v) Plan for the disposition of recovered refrigerant;
  - (vi) Plan for the disposition of the refrigerant-containing appliance, if retired; and
  - (vii) A schedule, not to exceed one year, for completion of the appliance retrofit or retirement.
- (3) The retrofit or retirement plan must be signed by an authorized company official, dated, accessible at the site of the refrigerant-containing appliance in paper copy or electronic format, and available for EPA inspection upon request.



(4) All identified leaks must be repaired as part of any retrofit under such a plan.

(5) A retrofit or retirement plan must be implemented as follows:

(i) Unless granted additional time, all work performed in accordance with the plan must be finished within one year of the plan's date (not to exceed 12 months from when the plan was finalized as required in paragraph (h)(1) of this section).

(ii) The owner or operator may request that EPA relieve it of the obligation to retrofit or retire a refrigerant-containing appliance if the owner or operator can establish within 180 days of the plan's date that the refrigerant-containing appliance no longer exceeds the applicable leak rate and if the owner or operator agrees in writing to repair all identified leaks within one year of the plan's date consistent with paragraphs (h)(4) and (h)(5)(i) of this section. The owner or operator must submit to EPA the retrofit or retirement plan as well as the following information: The date that the requirement to develop a retrofit or retirement plan was triggered; the leak rate; the method used to determine the leak rate and full charge; the location of the leak(s) identified in the leak inspection; a description of the repairs that have been completed; a description of repairs that have not been completed; a description of why repairs were not conducted within the time frames required under paragraphs (d) and (f) of this section; and a statement signed by an authorized company official that all identified leaks will be repaired and an estimate of when those repairs will be completed (not to exceed one year from date of the plan). The request will be considered approved unless EPA notifies the owner or operator within 60 days of receipt of the request that it is not approved.

(i) ***Extensions to the one-year retrofit or retirement schedule.*** Owners or operators may request more than one year to comply with paragraph (h) of this section if they meet the requirements of this paragraph. The request will be considered approved unless EPA notifies the owners or operators within 60 days of receipt of the request that it is not approved. The request must be submitted to EPA electronically, using the Agency's applicable reporting platform, within seven months of discovering the refrigerant-containing appliance exceeded the applicable leak rate. The request must include the identification of the refrigerant-containing appliance; name of the owner or operator; the leak rate; the method used to determine the leak rate and full charge; the date the refrigerant-containing appliance exceeded the applicable leak rate; the location of leaks(s) to the extent determined to date; any repairs that have been finished thus far, including the date that repairs were finished; a plan to finish the retrofit or retirement of the refrigerant-containing appliance; the reasons why more than one year is necessary to retrofit or retire the refrigerant-containing appliance; the date of notification to EPA; a signature from an authorized company official; and an estimate of when the retrofit or retirement will be finished. A dated copy of the request must be available on-site in either electronic or paper copy. If the estimated completion date is to be revised, a new estimated date of completion and documentation of the reason for that change must be submitted to EPA electronically, using the Agency's applicable reporting platform, within 30 days. Additionally, the time frames in paragraph (h) of this section and this paragraph (i) are temporarily suspended when a refrigerant-containing appliance is mothballed. The time will resume running on the day additional refrigerant is added to the refrigerant-containing appliance (or component of a refrigerant-containing appliance if the leaking component was isolated).

(1) ***Extensions available to industrial process refrigeration.*** Owners or operators of industrial process refrigeration appliances may request additional time beyond the one-year period in paragraph (h) of this section to finish the retrofit or retirement under the following circumstances:

- (i) Requirements of other applicable Federal, State, local, or Tribal regulations make a retrofit or retirement within one year impossible. Additional time is permitted to the extent needed to comply with the pertinent regulations;
- (ii) The new or the retrofitted equipment is custom-built as defined in this subpart and the supplier of the appliance or one of its components has quoted a delivery time of more than 30 weeks from when the order is placed. The appliance or appliance components must be installed within 120 days after receiving delivery of the necessary parts;
- (iii) The equipment or component is located in an area subject to radiological contamination and creating a safe working environment will require more than 30 weeks; or
- (iv) After receiving an extension under paragraph (i)(1)(ii) of this section, owners or operators may request additional time if necessary to finish the retrofit or retirement of the refrigerant-containing appliance. The request must be submitted to EPA before the end of the ninth month of the initial extension and must include the same information submitted for that extension, with any necessary revisions. A dated copy of the request must be available on-site in either electronic or paper copy. The request will be considered approved unless EPA notifies the owners or operators within 60 days of receipt of the request that it is not approved.

(2) [Reserved]

- (j) **Chronically leaking appliances.** Owners or operators of refrigerant-containing appliances containing 15 or more pounds of refrigerant that leak 125 percent or more of the full charge in a calendar year must submit a report containing the information required in paragraph (m)(4) of this section to EPA by March 1 of the subsequent year.
- (k) **Purged refrigerant.** In calculating annual leak rates, purged refrigerant that is destroyed at a verifiable destruction efficiency of 98 percent or greater will not be counted toward the leak rate.
- (l) **Recordkeeping.** All records identified in this paragraph must be kept for at least three years in electronic or paper format, unless otherwise specified.
  - (1) By January 1, 2026, or upon installation for refrigerant-containing appliances installed on or after January 1, 2026, owners or operators must determine the full charge of all refrigerant-containing appliances with 15 or more pounds of refrigerant and maintain the following information for each appliance until three years after the appliance is retired:
    - (i) The identification of the owner or operator of the refrigerant-containing appliance;
    - (ii) The address where the appliance is located;
    - (iii) The full charge of the refrigerant-containing appliance and the method for how the full charge was determined;
    - (iv) If using method 4 (using an established range) for determining full charge, records must include the range for the full charge of the refrigerant-containing appliance, its midpoint, and how the range was determined;
    - (v) Any revisions of the full charge, how they were determined, and the dates such revisions occurred; and
    - (vi) The date of installation.

- (2) Owners or operators must maintain a record including the following information for each time a refrigerant-containing appliance with a full charge of 15 or more pounds is installed, serviced, repaired, or disposed of, when applicable.
  - (i) The identity and location of the refrigerant-containing appliance;
  - (ii) The date of the installation, service, repair, or disposal performed;
  - (iii) The part(s) of the refrigerant-containing appliance being installed, serviced, repaired, or disposed;
  - (iv) The type of installation, service, repair, or disposal performed for each part;
  - (v) The name of the person performing the installation, service, repair, or disposal;
  - (vi) The amount and type of refrigerant added to, or in the case of disposal removed from, the appliance;
  - (vii) The full charge of the refrigerant-containing appliance; and
  - (viii) The leak rate and the method used to determine the leak rate (not applicable when disposing of the refrigerant-containing appliance, following a retrofit, installing a new refrigerant-containing appliance, or if the refrigerant addition qualifies as a seasonal variance).
- (3) Owners or operators must maintain the following records of changes to the leak rate calculation method after a change in ownership or acquisition specified in paragraph (b)(3) of this section:
  - (i) Basic identification information (*i.e.*, owner or operator, facility name, facility address where appliance is located, and appliance ID or description);
  - (ii) The date the operating facility referenced in paragraph (b)(3)(i) was purchased or otherwise acquired;
  - (iii) The leak rates for all refrigerant-containing appliances at any operating facility for which the leak rate calculation methodology would change, listing the results for each leak rate calculation methods (the annualizing method and the rolling average method) separately;
  - (iv) The date the new leak rate calculation method is adopted; and
  - (v) The leak rate calculation method the owner or operator is using after the change.
- (4) If the installation, service, repair, or disposal is done by someone other than the owner or operator, that person must provide a record containing the information specified in paragraph (l)(2)(i) through (l)(2)(vi) of this section, when applicable, to the owner or operator.
- (5) Owners or operators must keep records of leak inspections that include the date of inspection, the method(s) used to conduct the leak inspection, a list of the location of each leak that was identified, and a certification that all visible and accessible parts of the refrigerant-containing appliance were inspected. The certified technicians conducting the leak inspections must, upon conclusion of that service, provide the owner or operator of the refrigerant-containing appliance with documentation that meets these requirements.
- (6) If using an automatic leak detection system, the owner or operator must maintain records regarding the installation and the annual audit and calibration of the system, a record of each date the monitoring system identified a leak, and the location of the leak.

- (7) Owners or operators must maintain records of the dates and results of all initial and follow-up verification tests. Records must include the location of the refrigerant-containing appliance, the date(s) of the verification tests, the location(s) of all repaired leaks that were tested, the type(s) of verification test(s) used, and the results of those tests. The certified technicians conducting the initial or follow-up verification tests must, upon conclusion of that service, provide the owner or operator of the appliance with documentation that meets these requirements.
- (8) Owners or operators must maintain retrofit or retirement plans developed in accordance with paragraph (h) of this section.
- (9) Owners or operators must maintain retrofit and/or retirement extension requests submitted to EPA in accordance with paragraph (i) of this section.
- (10) Owners or operators that suspend the deadlines in this section by mothballing a refrigerant-containing appliance must keep records documenting when the appliance was mothballed and when additional refrigerant was added to the appliance (or isolated component).
- (11) Owners or operators who exclude purged refrigerants that are destroyed from annual leak rate calculations must maintain records to support the amount of refrigerant claimed as sent for destruction. Records must be based on a monitoring strategy that provides reliable data to demonstrate that the amount of refrigerant claimed to have been destroyed is not greater than the amount of refrigerant actually purged and destroyed and that the 98 percent or greater destruction efficiency is met. Records must include flow rate, quantity or concentration of the refrigerant in the vent stream, and periods of purge flow. Records must include:
  - (i) The identification of the facility and a contact person, including the address and telephone number;
  - (ii) A description of the refrigerant-containing appliance, focusing on aspects relevant to the purging of refrigerant and subsequent destruction;
  - (iii) A description of the methods used to determine the quantity of refrigerant sent for destruction and type of records that are being kept by the owners or operators where the appliance is located;
  - (iv) The frequency of monitoring and data-recording; and
  - (v) A description of the control device, and its destruction efficiency.
- (12) Owners or operators that exclude additions of refrigerant due to seasonal variance from their leak rate calculation must maintain records stating that they are using the seasonal variance flexibility and documenting the amount added and removed under paragraph (l)(2) of this section.
- (13) Owners or operators that submit reports to EPA in accordance with paragraph (m) of this section must maintain copies of the submitted reports and any responses from EPA.
- (m) **Reporting.** All notifications must be submitted electronically using the Agency's applicable reporting platform.
  - (1) Owners or operators must notify EPA electronically, using the Agency's applicable reporting platform, in accordance with paragraph (f) of this section when seeking an extension of time to complete repairs.

- (2) Owners or operators must notify EPA electronically, using the Agency's applicable reporting platform, in accordance with paragraph (h)(5)(ii) of this section when seeking relief from the obligation to retrofit or retire an appliance.
- (3) Owners or operators must notify EPA electronically, using the Agency's applicable reporting platform, in accordance with paragraph (i) of this section when seeking an extension of time to complete the retrofit or retirement of an appliance.
- (4) Owners or operators must report to EPA electronically, using the Agency's applicable reporting platform, the following information in accordance with paragraph (j) of this section for any refrigerant-containing appliance containing 15 or more pounds of refrigerant that leaks 125 percent or more of the full charge in a calendar year:
  - (i) Basic identification information (i.e., owner or operator, facility name, facility address where appliance is located, and appliance ID or description);
  - (ii) Refrigerant-containing appliance type (comfort cooling or other, industrial process refrigeration, or commercial refrigeration);
  - (iii) Refrigerant type;
  - (iv) Full charge of appliance (pounds);
  - (v) Annual percent refrigerant loss;
  - (vi) Dates of refrigerant addition;
  - (vii) Amounts of refrigerant added;
  - (viii) Date of last successful follow-up verification test;
  - (ix) Explanation of cause refrigerant losses;
  - (x) Description of repair actions taken;
  - (xi) Whether a retrofit or retirement plan has been developed for the refrigerant-containing appliance and if so, the anticipated date of retrofit or retirement; and
  - (xii) A signed statement from an authorized company official.
- (5) When excluding purged refrigerants that are destroyed from annual leak rate calculations, owners or operators must notify EPA electronically, using the Agency's applicable reporting platform, within 60 days after the first time the exclusion is used by the facility where the appliance is located. The report must include the information included in paragraph (l)(11) of this section and must be signed by an authorized company official.

#### **§ 84.108 Automatic leak detection systems.**

- (a) Owners or operators of refrigerant-containing appliances used for industrial process refrigeration or commercial refrigeration with a full charge of 1,500 pounds or greater of a refrigerant containing a regulated substance or a substitute for a regulated substance with a global warming potential greater than 53 must install and use an automatic leak detection system in accordance with this section.
  - (1) If the refrigerant in a refrigerant-containing appliance contains a substitute for a regulated substance, whether the global warming potential of the substitute is greater than 53 will be determined as described in § 84.106(a)(2).

(2) [Reserved]

(b)

- (1) Owners and operators of refrigerant-containing appliances that are subject to the requirements under paragraph (a) of this section and that are installed on or after January 1, 2026, must install and use an automatic leak detection system upon installation of the refrigerant-containing appliance or within 30 days of installation of the refrigerant-containing appliance.
- (2) Owners and operators of refrigerant-containing appliances that are subject to the requirements under paragraph (a) of this section and that were installed on or after January 1, 2017, and before January 1, 2026, must install and use an automatic leak detection system by January 1, 2027.

(c) Automatic leak detection systems must be installed in accordance with manufacturer instructions.

(d) Automatic leak detection systems must be audited and calibrated annually.

(e) Automatic leak detection systems are required to monitor components located inside an enclosed building or structure.

(f) For automatic leak detection systems that directly detect the presence of a refrigerant in air, the system must:

- (1) Have sensors or intakes placed so that they will continuously monitor the refrigerant concentrations in air in proximity to the compressor, evaporator, condenser, and other areas with a high potential for a refrigerant leak;
- (2) Accurately detect a concentration level of 10 parts per million of vapor of the specific refrigerant or refrigerants used in the refrigerant-containing appliance(s); and
- (3) Alert the owner or operator when a refrigerant concentration of 100 parts per million of vapor of the specific refrigerant or refrigerants used in the appliance(s) is reached.

(g) For automatic leak detection systems that monitor conditions of the refrigerant-containing appliance, the system must automatically alert the owner or operator when measurements indicate a loss of 50 pounds of refrigerant or 10 percent of the full charge, whichever is less.

(h) When an automatic leak detection system alerts an owner or operator of a leak as described in this section, owners and operators of refrigerant-containing appliances using automatic leak detection systems must comply with the requirements either in paragraph (h)(1) or in (h)(2) of this section and must also comply with paragraph (h)(3) of this section where applicable:

- (1) Calculate the leak rate within 30 days (or 120 days where an industrial process shutdown would be necessary) of an alert and, if the leak rate is above the applicable leak rate as described in § 84.106(c)(2), comply with the full suite of leak repair provisions in § 84.106; or
- (2) Preemptively repair the identified leak(s) before adding refrigerant to the appliance and then calculate the leak rate within 30 days (or 120 days where an industrial process shutdown would be necessary) of an alert. If the leak rate is above the applicable leak rate as described in § 84.106(c)(2), the owner or operator must comply with the full suite of leak repair provisions in § 84.106.

- (3) Where a refrigerant-containing appliance using an automatic leak detection system is found to be leaking above the applicable leak rate as described in § 84.106(c)(2), and the automatic leak system is only being used to monitor portions of an appliance, the remainder of the appliance continues to be subject to any applicable leak inspection requirements, as described in § 84.106(g).
- (i) **Recordkeeping.** The owner or operator must maintain records for at least three years in electronic or paper format, unless otherwise specified, regarding:
  - (1) The installation of the automatic leak detection system;
  - (2) The annual audit and calibration of the system;
  - (3) A record of each date the automatic leak detection system triggers an alert; and
  - (4) The location of the leak(s) which resulted in the alarm.

### § 84.110 Emissions from fire suppression equipment.

- (a) As of January 1, 2026, no person installing, servicing, repairing, or disposing of fire suppression equipment containing a regulated substance may knowingly vent or otherwise release into the environment any regulated substances used in such equipment.
  - (1) Release of regulated substances during testing of fire suppression equipment is not subject to the prohibition under this paragraph (a) if the following four conditions are met:
    - (i) Equipment employing suitable alternative fire suppression agents are not available;
    - (ii) Release of fire suppression agent is essential to demonstrate equipment functionality;
    - (iii) Failure of the system or equipment would pose great risk to human safety or the environment; and
    - (iv) A simulant agent cannot be used in place of the regulated substance for testing purposes.
  - (2) The prohibition under this paragraph (a) does not apply to qualification and development testing during the design and development process of fire suppression equipment containing regulated substances when such tests are essential to demonstrate equipment functionality and when a suitable simulant agent cannot be used in place of the regulated substance for testing purposes.
  - (3) The prohibition under this paragraph (a) does not apply to the emergency release of regulated substances for the legitimate purpose of fire extinguishing, explosion inertion, or other emergency applications for which the fire suppression equipment was designed.
- (b) As of January 1, 2026, no owner or operator of fire suppression equipment containing regulated substances shall allow the release of regulated substances to occur as a result of failure to maintain such fire suppression equipment.
- (c) As of January 1, 2030, recycled regulated substances must be used for the initial installation of new fire suppression equipment, including both total flooding systems and streaming applications, that is installed in the United States. As of January 1, 2026, recycled regulated substances must be used for the servicing and/or repair of existing fire suppression equipment in the United States, including both total flooding systems and streaming applications. Notwithstanding the prior sentences, if the fire suppression equipment does not use any regulated substance, this requirement does not apply. If the fire suppression equipment uses a regulated substance in combination with other fire suppression agents, this requirement will only apply to the regulated substance used.

- (d) Any person who employs fire suppression technicians who install, service, repair, or dispose of fire suppression equipment containing regulated substances shall train technicians hired on or before January 1, 2026, on emissions reduction of regulated substances by June 1, 2026. Fire suppression technicians hired after January 1, 2026, shall be trained regarding emissions reduction of regulated substances within 30 days of hiring, or by June 1, 2026, whichever is later.
  - (1) The fire suppression technician training shall include an explanation of the purpose of the training requirement and also address the following:
    - (i) The significance of minimizing releases of regulated substances and ensuring technician safety;
    - (ii) An overview of regulated substances and environmental concerns with regulated substances, including discussion of other federal, State, local, or Tribal fire, building, safety, and environmental codes and standards;
    - (iii) A review of relevant regulations concerning regulated substances, including the requirements of this subpart that apply with respect to fire suppression equipment; and
    - (iv) Specific technical instruction relevant to avoiding unnecessary emissions of regulated substances during the servicing, repair, disposal, or installation of fire suppression equipment at the different types of facilities where the technician might perform such work on fire suppression equipment.
  - (2) [Reserved]
- (e) As of January 1, 2026, no person shall dispose of fire suppression equipment containing regulated substances except by either recovering the regulated substances themselves before sending the equipment for disposal or by leaving the regulated substances in the equipment and sending it for disposal to a facility, such as a fire suppression equipment manufacturer, a distributor, or a fire suppressant recycler.
- (f) As of January 1, 2026, no person shall dispose of regulated substances used as a fire suppression agent except by sending it for recycling to a fire suppressant recycler or a reclaimer certified under 40 CFR 82.164, or by arranging for its destruction using one of the controlled processes listed in § 84.29.
  - (1) Any person using a device to recover, store, and/or transfer regulated substances used in fire suppression equipment must: evacuate the device used to recover, store, and/or transfer regulated substances prior to each use to prevent contamination, arrange for destruction of the recovered regulated substances as necessary; and collect and dispose of wastes from the recycling process.
  - (2) Any person using recovery and recycling equipment to recover regulated substances from fire suppression equipment must:
    - (i) Operate and maintain recovery and recycling equipment in accordance with manufacturer specifications to ensure that the equipment performs as specified;
    - (ii) Repair leaks in storage, recovery, recycling, and/or charging equipment used with regulated substances before use; and
    - (iii) Ensure that cross-contamination does not occur through the mixing of regulated substances that may be contained in similar cylinders.
- (g)



- (1) As of January 1, 2026, any person who performs first fill of fire suppression equipment, service (e.g., recharge) of fire suppression equipment, and/or recycles regulated substances recovered from fire suppression equipment, such as equipment manufacturers, distributors, agent suppliers, or installers that recycle regulated substances, must submit a report to EPA annually covering the prior year's activity from January 1 through December 31. The first annual report must be submitted to the Agency on February 14, 2027, and subsequent annual reports must be submitted by February 14 of each subsequent year. Each annual report must be submitted electronically, using the Agency's applicable reporting platform. Each annual report must contain basic identification information (i.e., owner name, facility name, facility address where equipment is located) and the following information for each regulated substance: the quantity of material (the combined mass of regulated substance and contaminants) sold for the purpose of installation of new fire suppression equipment and servicing and/or repair of existing fire suppression equipment; the quantity of material (the combined mass of regulated substance and contaminants) in inventory onsite for the purpose of installation of new fire suppression equipment and servicing and/or repair of existing fire suppression equipment broken out by recovered, recycled, and virgin; the total mass of each regulated substance sold for the purpose of installation of new fire suppression equipment and servicing and/or repair of existing fire suppression equipment; the total mass of each regulated substance in inventory onsite for the purpose of installation of new fire suppression equipment and servicing and/or repair of existing fire suppression equipment broken out by recovered, recycled, and virgin; and the total mass of waste products the reporting entity sent for disposal, along with information about the disposal facility if waste is not processed by the reporting entity. A copy of the submitted reports must be maintained for three years in either electronic or paper format. If any entity reports information to EPA under § 84.31(j) that is also required to be reported under this paragraph, to the extent the information reported under § 84.31(j) overlaps with the information that must be reported under this paragraph, in lieu of reporting the same information twice, the entity may refer to the corresponding information reported under § 84.31(j) and explain how it satisfies the reporting requirements in completing the reporting under this paragraph.
- (2) As of January 1, 2026, any person who employs fire suppression technicians who service, repair, install, or dispose of fire suppression equipment containing regulated substances must maintain an electronic or paper copy of the fire suppression technician training used to meet the requirements in paragraph (d) of this section and make that copy available to EPA upon request. These entities must document that they have provided training to personnel as specified in paragraph (d) of this section and must maintain these records for three years after each training in either electronic or paper format.
- (3) As of January 1, 2026, owners and operators of fire suppression equipment containing regulated substances must maintain records documenting that regulated substances are recovered from the fire suppression equipment before it is sent for disposal as specified in paragraph (e) of this section. Such records must be maintained for three years after the relevant equipment is sent for disposal in either electronic or paper format.

## § 84.112 Reclamation.

- (a) **Reclamation Standard.** As of January 1, 2026, no person may sell, identify, or report refrigerant as being reclaimed for use in the installation, servicing, or repair of refrigerant-containing equipment if the regulated substance component of the resulting refrigerant contains more than 15 percent, by weight, of virgin regulated substance.

- (b) **Bona fide use.** No person may sell, identify, or report refrigerant as being reclaimed if it contains any recovered regulated substance that has not had bona fide use in equipment, unless that refrigerant was removed from the heel or residue of a container that had a bona fide use in the servicing, repair, or installation of refrigerant-containing equipment.
- (c) **Labeling.** As of January 1, 2026, reclaimers certified under 40 CFR 82.164 must affix a label to any container they fill that is being sold or distributed or offered for sale or distribution and that contains reclaimed regulated substances to certify that the contents do not exceed 15 percent, by weight, of virgin regulated substances.
  - (1) The label must read: "The contents of this container do not exceed the limit of 15 percent, by weight, on virgin regulated substance per 40 CFR 84.112(a)."
  - (2) The label must be:
    - (i) In English;
    - (ii) Durable and printed or otherwise labeled on, or affixed to, an external surface of the container;
    - (iii) Readily visible and legible;
    - (iv) Able to withstand open weather exposure without a substantial reduction in visibility or legibility; and
    - (v) Displayed on a background of contrasting color.
- (d) **Recordkeeping.** As of January 1, 2026, reclaimers certified under 40 CFR 82.164 must generate a record to certify that the reclaimed regulated substance(s) being used to fill a container that will be sold or distributed or offered for sale or distribution do not exceed 15 percent, by weight, of virgin regulated substances.
  - (1) The record must be generated electronically, in a format specified by EPA.
  - (2) The record must contain the following information:
    - (i) The name, address, contact person, email address, and phone number of the reclaimer certified under 40 CFR 82.164 who is making the certification;
    - (ii) The date the container was filled with reclaimed regulated substance(s);
    - (iii) The amount and name of the regulated substance(s) in the container(s);
    - (iv) Certification that the contents of the container are from a batch where the amount of virgin regulated substance(s) does not exceed 15 percent, by weight, of the total regulated substance(s);
    - (v) The unique serial number associated with the container(s) filled from the batch;
    - (vi) Identification of the batch of reclaimed regulated substance(s) used to fill the container(s); and
    - (vii) The percent, by weight, of virgin regulated substance(s) in the batch used to fill the container(s).
  - (3) The record must be maintained by the reclaimer certified under 40 CFR 82.164 for three years.

- (e) ***Servicing and/or repair.*** As of January 1, 2029, the servicing and/or repair of refrigerant-containing equipment that contains a regulated substance must be done with reclaimed refrigerant that meets the requirements of 84.112(a)-(c) of this section if such equipment is in one or more of the following subsectors:
- (1) Supermarket systems;
  - (2) Refrigerated transport; and
  - (3) Automatic commercial ice makers.
- (f) ***Reporting.***
- (1) Reclaimers, distributors, and wholesalers of reclaimed refrigerants that contain regulated substances that are sold or distributed for the intended purpose of servicing and/or repair of refrigerant-containing equipment in the subsectors listed in paragraph (e) of this section must submit a report to EPA electronically, using the Agency's applicable reporting platform, by February 14, 2027, covering activity from January 1 through December 31, 2026 and containing the following information: name and address of the company; contact person, email address, and phone number of the responsible party; the quantity of reclaimed refrigerant containing regulated substance(s) by the name and mass of reclaimed refrigerant(s); and indication of the specific subsector(s) where the reclaimed refrigerant(s) containing regulated substance(s) are sold or distributed.
  - (2) Reclaimers, distributors, and wholesalers of reclaimed refrigerants that contain regulated substances that are sold or distributed for the intended purpose of servicing and/or repair of refrigerant-containing equipment in the subsectors listed in paragraph (e) of this section must submit a report to EPA electronically, using the Agency's applicable reporting platform, by February 14, 2028, covering activity from January 1 through December 31, 2027 and containing the following information: name and address of the company; contact person, email address, and phone number of the responsible party; the quantity of reclaimed refrigerant containing regulated substance(s) by the name and mass of reclaimed refrigerant(s); and indication of the specific subsector(s) where the reclaimed refrigerant(s) containing regulated substance(s) are sold or distributed.

#### **§ 84.114 Exemptions.**

- (a) Notwithstanding the other provisions of this subpart, the regulations under this subpart do not apply to a regulated substance or a substitute for a regulated substance that is contained in a foam.
- (b) Notwithstanding the other provisions of this subpart, the regulations under this subpart do not apply to two applications, mission-critical military end uses and on board aerospace fire suppression, as listed at § 84.13(a), for a year or years for which that application receives an application-specific allowance as defined at § 84.3.

#### **§ 84.116 Requirements for disposable cylinders.**

- (a) As of January 1, 2028, any person who uses a disposable cylinder must send such disposable cylinder for further processing to remove the heel, as described in paragraphs (b) and (c) of this section, when:
  - (1) The disposable cylinder contains a regulated substance(s);
  - (2) The disposable cylinder was used in the servicing, repair, or installation of refrigerant-containing equipment or fire suppression equipment; and

- (3) The person does not intend to use the disposable cylinder in future servicing, repair, or installation of refrigerant-containing equipment or fire suppression equipment.
- (b) Except as provided in paragraphs (e) and (g) in this section, disposable cylinders that meet the criteria in paragraphs (a)(1), (a)(2), and (a)(3) of this section must be sent to:
  - (1) A reclaimer certified under 40 CFR 82.164;
  - (2) A fire suppressant recycler, if the disposable cylinder was used in the servicing, repair, or installation of fire suppression equipment;
  - (3) A final processor, such as a landfill operator or a scrap metal recycler, who is capable of removing the heel from disposable cylinders; or
  - (4) A refrigerant supplier (including but not limited to distributors and wholesalers), who is capable of removing the heel from disposable cylinders.
- (c) Regulated substance(s) removed from heels of disposable cylinders by those entities identified in paragraphs (b)(3) and (b)(4) of this section, where those removed heels are or are not aggregated into a larger container, must be sent to a reclaimer certified under 40 CFR 82.164 or a fire suppressant recycler.
  - (1) Regulated substance(s) removed from heels of disposable cylinders that exhibit ignitability characteristics (per 40 CFR 261.21), where those removed heels are or are not aggregated into a larger container, must be sent to a reclaimer certified under 40 CFR 82.164 that is in compliance with the requirements at 40 CFR part 266, subpart Q.
  - (2) [Reserved]
- (d) As of January 1, 2028, an entity as described in paragraphs (b)(1), (b)(2), (b)(3), or (b)(4) of this section who receives a disposable cylinder meeting the criteria in paragraphs (a)(1), (a)(2), and (a)(3) of this section must remove all remaining contents from the disposable cylinder prior to discarding the disposable cylinder.
- (e) Disposable cylinders that that meet the criteria in paragraphs (a)(1), (a)(2), and (a)(3) of this section may be discarded to a final processor without meeting the requirements in paragraphs (b) and (d) of this section, when:
  - (1) The heel was removed by a certified technician;
  - (2) The heel of the used disposable cylinder has been evacuated to a vacuum of 15 in-Hg prior to discarding the cylinder;
  - (3) The certified technician provides a certification statement, which certifies that the heel was evacuated to a vacuum of 15 in-Hg; states the name and address of the certified technician who evacuated the cylinder(s) and the date the cylinder(s) was/were evacuated; and is signed by the certified technician who evacuated the cylinder(s); and
  - (4) The certified technician discarding the cylinder to the final processor must provide the signed certification statement described in paragraph (e)(3) of this section to the final processor (which may include a landfill operator or scrap metal recycler) when they discard the cylinder to the final processor.
- (f) **Recordkeeping.** A final processor who receives a disposable cylinder as described in paragraph (e) of this section must maintain a record of the signed statement for three years.

- (g) Small cans of refrigerant that contain no more than two pounds of refrigerant and that qualify for the exemption described in 40 CFR 82.154(c)(1)(ix) are not subject to the requirements in paragraphs (b) through (f) of this section.

### § 84.118 Treatment of data submitted under 40 CFR part 84, subpart C

- (a) Except as otherwise provided in this section, 40 CFR 2.201 through 2.215 and 2.301 do not apply to data submitted under this subpart that EPA has determined through rulemaking to be either of the following:
  - (1) Emission data, as defined in 40 CFR 2.301(a)(2), determined in accordance with section 114(c) and 307(d) of the Clean Air Act; or
  - (2) Data not otherwise entitled to confidential treatment.
- (b) Except as otherwise provided in paragraph (d) of this section, 40 CFR 2.201 through 2.208 and 2.301(c) and (d) do not apply to data submitted under this subpart that EPA has determined through rulemaking to be entitled to confidential treatment. EPA shall treat that information as confidential in accordance with the provisions of 40 CFR 2.211, subject to paragraph (d) of this section and 40 CFR 2.209.
- (c) Upon receiving a request under 5 U.S.C. 552 for data submitted under this subpart that EPA has determined through rulemaking to be entitled to confidential treatment, the relevant Agency official shall furnish the requestor a notice that the information has been determined to be entitled to confidential treatment and that the request is therefore denied. The notice shall include or cite to the appropriate EPA determination.
- (d) A determination made through rulemaking that information submitted under this subpart is entitled to confidential treatment shall continue in effect unless, subsequent to the confidentiality determination through rulemaking, EPA takes one of the following actions:
  - (1) EPA determines through a subsequent rulemaking that the information is emission data or data not otherwise entitled to confidential treatment; or
  - (2) The Office of General Counsel issues a final determination, based on the requirements of 5 U.S.C. 552(b)(4), stating that the information is no longer entitled to confidential treatment because of change in the applicable law or newly discovered or changed facts. Prior to making such final determination, EPA shall afford the business an opportunity to submit comments on pertinent issues in the manner described by 40 CFR 2.204(e) and 2.205(b). If, after consideration of any timely comments submitted by the business, the Office of General Counsel makes a revised final determination that the information is not entitled to confidential treatment, the relevant agency official will notify the business in accordance with the procedures described in 40 CFR 2.205(f)(2).

### § 84.120 Relationship to other laws.

Section (k) of the AIM Act states that sections 113, 114, 304, and 307 of the Clean Air Act (42 U.S.C. 7413, 7414, 7604, 7607) shall apply to this section and any rule, rulemaking, or regulation promulgated by the Administrator pursuant to this section as though this section were expressly included in title VI of that Act (42 U.S.C. 7671 et seq.). Violation of this part is subject to Federal enforcement and the penalties laid out in section 113 of the Clean Air Act.

## Appendix A to Part 84—Regulated Substances

### HFCs LISTED AS REGULATED SUBSTANCES IN THE AIM ACT<sup>1</sup>

HFC	Chemical formula	Exchange value
HFC-134	CHF <sub>2</sub> CHF <sub>2</sub>	1,100
HFC-134a	CH <sub>2</sub> FCF <sub>3</sub>	1,430
HFC-143	CH <sub>2</sub> FCHF <sub>2</sub>	353
HFC-245fa	CHF <sub>2</sub> CH <sub>2</sub> CF <sub>3</sub>	1,030
HFC-365mfc	CF <sub>3</sub> CH <sub>2</sub> CF <sub>2</sub> CH <sub>3</sub>	794
HFC-227ea	CF <sub>3</sub> CHF <sub>2</sub> CF <sub>3</sub>	3,220
HFC-236cb	CH <sub>2</sub> FCF <sub>2</sub> CF <sub>3</sub>	1,340
HFC-236ea	CHF <sub>2</sub> CHF <sub>2</sub> CF <sub>3</sub>	1,370
HFC-236fa	CF <sub>3</sub> CH <sub>2</sub> CF <sub>3</sub>	9,810
HFC-245ca	CH <sub>2</sub> FCF <sub>2</sub> CHF <sub>2</sub>	693
HFC-43-10mee	CF <sub>3</sub> CHFCH <sub>2</sub> CF <sub>2</sub> CF <sub>3</sub>	1,640
HFC-32	CH <sub>2</sub> F <sub>2</sub>	675
HFC-125	CHF <sub>2</sub> CF <sub>3</sub>	3,500
HFC-143a	CH <sub>3</sub> CF <sub>3</sub>	4,470
HFC-41	CH <sub>3</sub> F	92
HFC-152	CH <sub>2</sub> FCH <sub>2</sub> F	53
HFC-152a	CH <sub>3</sub> CHF <sub>2</sub>	124
HFC-23	CHF <sub>3</sub>	14,800

<sup>1</sup> This table includes all isomers of the substances above, regardless of whether the isomer is explicitly listed on its own.

[86 FR 55222, Oct. 5, 2021]