

EPA's Refrigerant Management Requirements

What Technicians Need to Know



What is Section 608?

Section 608 of the Clean Air Act prohibits the knowing release of refrigerant during the maintenance, service, repair, or disposal of air-conditioning (AC) and refrigeration equipment. EPA requires proper refrigerant management practices by those who buy or sell refrigerant, technicians, owners and operators of AC and refrigeration systems, and others. These requirements apply for all refrigerants that contain ozone-depleting substances, e.g., hydrochlorofluorocarbons (HCFCs), and non-exempt substitute refrigerants, e.g., hydrofluorocarbons (HFCs), hydrofluoroolefins (HFOs) and blends thereof.

Some refrigerants are exempt from the refrigerant management requirements. Examples include carbon dioxide, nitrogen, and water. For a full list of exempt refrigerants, see 40 CFR § 82.154(a).

What are the Section 608 refrigerant management requirements for technicians?¹

Only certified technicians can use non-exempt refrigerants to service AC and refrigeration equipment. Technicians must comply with the following provisions for ozone-depleting and non-exempt substitute refrigerants. With the exception of the applicability of the leak repair provisions to substitutes, these provisions did not change as a result of EPA's 2020 update.

Sales Restriction

- Refrigerant can only be sold to technicians certified under Sections 608 or 609 of the Clean Air Act, where individuals may only purchase refrigerant consistent with the appliances covered by their certification.
 - There is an exception for small cans (under two pounds) of substitute refrigerant, which can be sold to individuals for use in a MVAC if the can has a self-sealing valve.
- Recovered refrigerant may not be resold unless it has been reclaimed by a certified reclaimer; is being transferred to equipment belonging to the same owner; or was used only in a motor vehicle air conditioner (MVAC) or MVAC-like appliance and was recycled.²

Technician Certification

Technicians servicing AC and refrigeration equipment must:

- Pass a certification exam offered by an approved technician certification program in order to maintain, service, repair, or dispose of appliances containing refrigerants.
- Keep a copy of their certificate at their place of business.
- Maintain a copy of their certificate until three years after no longer operating as a technician.

To assist in reissuing lost certification cards, certifying organizations must post online lists of newly certified technicians. Technicians may opt out of the online lists if they so choose.

¹ This fact sheet highlights select provisions that may be of most interest to this community. Please see the regulations at <https://go.usa.gov/xpKhq> for the full requirements. Requirements for individuals servicing motor vehicle air conditioners (MVAC) or MVAC-like appliances are discussed in more detail at www.epa.gov/mvac.

² This does not apply to the sale of used refrigerant for reclamation or destruction.

Recordkeeping for Appliances with 5 to 50 Pounds of Refrigerant

Technicians who dispose of mid-sized appliances (e.g., residential split AC systems), must keep records of:

- The location, date of recovery, and type of refrigerant recovered for each disposed appliance;
- The quantity of refrigerant, by type, recovered from disposed appliances in each calendar month; and
- The quantity of refrigerant, and type, transferred for reclamation or destruction, the person to whom it was transferred, and the date of the transfer.

Maintenance, Servicing, Repair, and Disposal

Technicians must:

- Evacuate refrigerant before opening or disposing of appliances to the evacuation levels specified in the regulations using certified recovery and/or recycling equipment.
- Before opening or disposing of MVACs or MVAC-like appliances (e.g., construction equipment),
 - Evacuate refrigerant from the appliance in accordance with 40 CFR Part 82, Subpart B; or
 - Reduce the system pressure to below 102 mm of mercury vacuum.

Important Changes to the Section 608 Leak Repair Regulations

The Section 608 regulations include leak inspection and verification test requirements for owners/operators of appliances that contain ozone-depleting refrigerant. These regulations do not apply to appliances containing solely substitute refrigerant such as HFCs.

Leak inspections are required for appliances that have exceeded the applicable leak rate, according to the schedule below. All visible and accessible components of an appliance must be inspected, using a method or methods that are appropriate for that appliance.

| Equipment | Full Charge | Frequency of Leak Inspections |
|--|-------------------|--|
| Commercial Refrigeration and Industrial Process Refrigeration | > 500 pounds | <i>Once every three months</i> until the owner/operator can demonstrate through leak rate calculations that the leak rate has not exceeded 20% (commercial refrigeration) or 30% (IPR) for four quarters in a row. |
| | 50 to 500 pounds | <i>Once per calendar year</i> until the owner/operator can demonstrate through the leak rate calculations that the leak rate has not exceeded 20% (commercial refrigeration) or 30% (IPR) for one year. |
| Comfort Cooling | 50 or more pounds | <i>Once per calendar year</i> until the owner/operator can demonstrate through the leak rate calculations that the leak rate has not exceeded 10% for one year. |

Initial and follow-up verification tests of leak repairs are required for appliances that exceed the applicable leak rate. The verification tests must demonstrate that leaks were successfully repaired.

- An initial verification test must be performed before any additional refrigerant is added to the appliance.
- A follow-up verification test must be performed only after the appliance has returned to normal operating characteristics and conditions. There is no minimum timeframe.

Technicians are required to provide service invoices and records of the results of leak inspections or verification tests to owners/operators.

Additional Resources

Update to the Refrigerant Management Requirements Final Rule:

www.epa.gov/section608/revised-section-608-refrigerant-management-regulations

EPA's Section 608 Webpage: www.epa.gov/section608

Section 608 Technician Certification: www.epa.gov/section608/section-608-technician-certification

Section 609 Technician Training and Certification: www.epa.gov/mvac

Contact EPA: www.epa.gov/section608/forms/contact-us-about-stationary-refrigeration-and-air-conditioning