

The EPA's Updated Refrigerant Management Requirements

What Technicians Need to Know



What are the Section 608 regulations?

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. The EPA requires proper refrigerant management practices by technicians, owners and operators of refrigeration and AC systems, and others.

What's changing in these regulations?

In the fall of 2016, the EPA updated the existing requirements related to ozone-depleting substances (ODS), such as CFCs and HCFCs, and extended them to substitutes such as HFCs.¹ The updates include:

- More stringent requirements for repairing leaks in larger appliances;
- New recordkeeping for the disposal of appliances containing five to 50 pounds of refrigerant;
- New reporting requirement that kicks in when larger appliances leak 125% or more of their charge in a calendar year;
- Restricting the sale of HFC refrigerant to technicians certified under Sections 608 or 609 of the Clean Air Act; and
- Changes to improve readability and simplify compliance.

In addition to protecting the ozone layer, the EPA estimates that the updated requirements will decrease annual greenhouse gas emissions by **7.3 million MTCO₂e**—that's equivalent to taking 1.5 million cars off the road per year.

How will the new requirements affect technicians?

Technicians must handle HFC refrigerants and appliances containing HFC refrigerants in the same manner that they now handle ozone-depleting refrigerants. Implementation dates are staggered to provide time for outreach and training of technicians. Starting as early as **January 1, 2017**, technicians will need to comply with revised provisions.² Changes to the existing regulations are underlined.

Sales Restriction

Starting **January 1, 2017**, recovered ODS and substitute refrigerant may not be resold unless it has been reclaimed by a certified reclaimer or is charged into equipment belonging to the same owner.

Starting **January 1, 2018**, the sale of ODS and substitute refrigerant is restricted to certified technicians.

Technician Certification

Starting **January 1, 2018**, technicians must:

- Pass a certification exam offered by an approved technician certification program in order to maintain, service, repair, or dispose of appliances containing ODS or substitute refrigerants. The certification exam will be updated to reflect the new rules and new refrigerants prior to this date.
- 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.

¹ These regulations do not extend to substitutes that have been exempted from the venting prohibition, such as ammonia.

² This fact sheet highlights select changes that may be of most interest to this community. Please see the regulations for the full changes/requirements.

The EPA is not changing the types of certifications or requiring recertification for currently certified technicians. 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.

New Recordkeeping for Appliances with 5 to 50 Pounds of Refrigerant

Starting **January 1, 2018**, technicians who dispose of mid-sized appliances (e.g., residential split 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

Starting **January 1, 2018**, technicians must:

- Evacuate ODS or substitute refrigerants 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 motor vehicle air conditioning (MVAC) or MVAC-like appliances (e.g., cars and construction equipment),
 - Evacuate ODS or substitute 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.

Other Important Changes to the Section 608 Leak Repair Regulations for Technicians

The updated Section 608 regulations include new leak inspection and verification test requirements for owners/operators that will affect technicians starting **January 1, 2019**:

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

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

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

The EPA Stratospheric Ozone Contact: spdcomment@epa.gov



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