

Importance of Protecting the Ozone Layer

The stratospheric ozone layer shields the Earth from the sun's harmful ultraviolet radiation. Emissions of certain synthetic chemicals – including chlorofluorocarbons (CFCs), halons, and hydrochlorofluorocarbons (HCFCs) – that are commonly used as refrigerants, solvents, and insulating foams destroy the ozone layer and have created an "ozone hole" over the South Pole.

In addition, many of these ozone-depleting substances (ODS), as well as their substitutes such as hydrofluorocarbons (HFCs), are greenhouse gases that contribute to climate change. The purpose of this fact sheet is to help you understand requirements under the National Recycling and Emission Reduction Program.

National Recycling and Emission Reduction Program

The Clean Air Act (CAA) defines EPA's responsibilities for protecting and improving the nation's air quality and the stratospheric ozone layer. Section 608 establishes the National Recycling and Emission Reduction Program.

Prohibition on Venting

Section 608 prohibits individuals from intentionally venting ODS refrigerants (including CFCs and HCFCs) and their substitutes (such as HFCs), while maintaining, servicing, repairing, or disposing of airconditioning or refrigeration equipment.

The purpose of this program is to:

- Implement the venting prohibition.
- Reduce the use and emission of CFCs and HCFCs.
- Maximize the recapture and recycling of CFCs and HCFCs.
- Ensure the safe disposal of CFCs and HCFCs.

Phaseout of HCFCs

Through the Montreal Protocol on Substances that Deplete the Ozone Layer, the U.S. has committed to a collaborative international effort to end use of ozone-depleting substances. The U.S. phased out CFCs and halons in the mid 1990s. EPA is currently in the process of reducing HCFC production and import.

The schedule to phase out HCFCs follows:

January 1, 2010

Ban on production, import, and use of HCFC-22 and HCFC-142b, except for continuing servicing needs of existing equipment, achieving 75% of reduction goal.

January 1, 2015

Ban on production, import, and use of all HCFCs, except for continuing servicing needs of refrigeration equipment, achieving 90% of reduction goal.

January 1, 2020

Ban on production and import of HCFC-22 and HCFC-142b, achieving 99.5% of reduction goal.

January 1, 2030

Ban on remaining production and import of HCFCs, resulting in complete HCFC phase out.

Section 608 Regulatory Requirements: Stationary Refrigeration and Air Conditioning

TECHNICIAN CERTIFICATION Technicians servicing AC and

refrigeration equipment must

pass an EPA-approved examination

SERVICE **PRACTICES**

Technicians must evacuate air-conditioning and refrigeration equipment to established vacuum levels during servicing and disposal

REFRIGERANT RECOVERY AND/OR RECYCLING **EQUIPMENT**

Equipment must be certified by an EPA-approved testing organization to meet EPA requirements for refrigerant recovery efficiency

RECLAMATION

Recovered refrigerant must be reclaimed to specified purity levels by an EPA-certified reclaimer before it can be re-sold

SAFE DISPOSAL

The final person in the disposal chain must remove (or make certain that their customers have removed) refrigerants prior to appliance disposal

Overview of Section 608 Regulatory Requirements

REFRIGERANT LEAKS

AC and refrigeration equipment with 50 lb or more of ODS are subject to specific EPA requirements for leak repair

REFRIGERANT SALES RESTRICTION

Refrigerants can only be sold for use to certified technicians

RECORDKEEPING

Service technicians, owners, and operators of large refrigeration and AC equipment, refrigerant wholesalers, and EPA-certified refrigerant reclaimers must document dates, refrigerant charge amounts, and related information for equipment servicing and disposal

Unless otherwise specified, section 608 requirements apply to all refrigerants, excluding a limited number of exemptions.

Enforcement

EPA performs random inspections, responds to tips, and pursues potential cases against violators of the Section 608 regulations. EPA is authorized to assess fines for any violation of these regulations.

Additional Resources

EPA Ozone Layer Protection Website: epa.gov/ozone-layerprotection

EPA Section 608 Website:

epa.gov/section608

EPA Enforcement Website:

epa.gov/tips

EPA Motor Vehicle Air Condiitioning Website: epa.gov/mvac

EPA Responsible Appliance Disposal Website: epa.gov/rad/

EPA GreenChill Website:

epa.gov/greenchill/

