



Focus

Ozone Layer Protection

Background

The upper atmosphere's ozone layer filters out the sun's harmful ultraviolet rays. Two laws restrict the release of pollutants that harm the ozone layer:

- 1990 amendments to the federal Clean Air Act.
- 1991 Clean Air Washington amendments to the state Clean Air Act.

These laws regulate two classes of substances that harm the ozone layer:

- Class I: Chlorofluorocarbons (CFCs), halons, and others.
- Class II: Hydrochlorofluorocarbons (HCFCs). These cause less harm to the ozone layer and will be used until substances are developed that don't harm the ozone layer.

These compounds are used as cooling gasses in refrigerators and air conditioners. Other uses include fire suppression systems and manufacturing processes.

Production phase-outs

- After 1995 production and importation of most Class I substances will be banned. Recovery, recycling and reuse will be allowed and encouraged.
- By 2010 production and importation of most Class II substances will be banned. EPA may advance that deadline.

Appliances and heating, ventilation and air conditioning equipment

- It is illegal to intentionally vent a class I or II substance into the air when maintaining, servicing, repairing or disposing of an appliance or other refrigeration equipment.
- Leaks on equipment with 50 or more pounds of CFCs must be repaired. The law sets limits on cooling gas losses.
- EPA approved recovery equipment must be used to prevent venting into the air.
- Service technicians must have EPA approved certification after November 15, 1994.

Motor vehicle air conditioners

- Illegal to vent Class I or II substances into the air.
- Recovery equipment must be approved by EPA.
- Technicians who do air conditioning work must have EPA approved certification.
- Washington state law bans the sale of any container for do-it-yourself motor vehicle air conditioning servicing (except for off-road commercial or agricultural equipment).
 - ♦ Intent of state and federal laws is to prevent CFC emissions by repairing leaks.

Ban on non-essential consumer products

- Class I ban effective January 15, 1993. Includes sale and distribution of CFC-containing cleaning fluids and sprays for electronic and photographic equipment to non-commercial purchasers. Also, party streamers, noise horns, certain foams and aerosols.
 - ♦ CFCs have been removed from most household spray products since 1978.
- Class II ban effective January 1, 1994. Limits production and distribution of aerosols and plastics foams made with HCFCs.

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Labeling

- Required on containers of Class I and Class II substances. Includes:
 - ♦ Products that contain these substances.
 - ♦ Products in which these substances are used in the manufacturing process.

Significant New Alternatives Program (SNAP)

- EPA issues quarterly SNAP list of acceptable alternatives to CFCs and HCFCs.
- List includes products approved or banned for specific applications.

Ecology ozone layer protection efforts

- CFCs exempt from dangerous waste transportation reporting regulations if being shipped for recycling and reuse. (Transportation safety requirements still apply).
- Technical assistance manual on motor vehicle air conditioner servicing under development. An EPA technical bulletin on refrigeration servicing, "Complying with the Refrigerant Recycling Rule," (EPA-430-F-93-010) available from EPA numbers listed below.
- Regional office staff provides technical assistance and compliance information to repair shops and other facilities that work with CFCs. Staff also investigates citizen complaints.
- Statewide series of appliance disposal workshops, June 1994, included CFC handling information for solid waste utilities and repair shops.
- "Shoptalk" newsletter reports CFC developments affecting a variety of businesses.
- Western Washington auto repair shops in the Emission Check program have been surveyed for EPA certified CFC recovery equipment and certified air conditioning repair technicians.

Refrigerator and freezer recycling and disposal

Each county or city solid waste utility sets its own policy and fees for appliances that contain CFCs. Most accept these appliances. Some require handling only through private firms.

Accepting appliances with CFCs: *Special restrictions and fees may apply, and appliances may not be accepted at all drop sites. Call before you haul.* Adams, Asotin, Benton, Clallam, Clark, Columbia, Cowlitz, Ferry, Franklin, Garfield, Grays Harbor, Island, Jefferson, Kitsap, Kittitas, Klickitat, Lewis, Mason, Okanogan, Pacific, Pend Oreille, San Juan, Seattle, Skagit, Skamania, Spokane, Tacoma, Thurston, Wahkiakum, Walla Walla, Whitman, Yakima.

Must take appliances to private firm: *Some of these counties provide lists of area businesses that accept appliances with CFCs. Rates vary. Call ahead.* Chelan, Douglas, Grant, King, Lincoln, Snohomish, Stevens, Whatcom.

Enforcement

Ecology focuses on providing education and technical assistance to facilities subject to state and federal ozone layer protection laws. In cases of willful, ongoing violations, Ecology may take enforcement action or refer cases to EPA, which can levy fines up to \$25,000 per day.

Information resources

EPA Stratospheric Ozone Hotline, 7:00 a.m. to 1:00 p.m. Pacific time.....1-800-296-1996
EPA Seattle Information.....(206) 553-0775 or 1-800-424-4372
EPA Seattle, Christi Lee.....(206) 553-1505
Department of Ecology
Recycle Hotline, *appliance recycling and disposal information*.....1-800-RECYCLE

If you have special accommodation needs or require this document in alternative format, please call Tami Dahlgren at (360) 407-6830 (Voice) or (360) 407-6006 (TDD only).