

Appliance Recycling – Information for Recyclers

Recycling appliances

The U.S. Environmental Protection Agency (EPA) estimates that approximately 95% of the materials in household appliances can be recycled. Many appliances contain refrigerants that must be removed prior to recycling.

Safe disposal requirements

Appliance recyclers specialize in recovering the hazardous substances from appliances. These substances include chlorofluorocarbons (CFCs), or hydrofluorocarbons (HFCs), also known as Freon, refrigerant and polychlorinated biphenyls (PCBs) in the motor capacitors, mercury (in switches) and oil (in refrigerator compressors).

This fact sheet provides information for appliance recyclers on the safe disposal of CFCs. All other substances recovered must be handled and managed properly. Any oil recovered from the compressor or lines needs to be managed as used oil. Typically there is about ½ to 1 cup of oil, and other hazardous substances, in such cases.

Step 1: Obtain technician certification

Persons who are in the business of recycling appliances that may contain refrigerant must obtain technician certification through an EPA-approved program. The program will issue a certificate upon the technician's successful completion of an exam. Four types of certifications are available. The type of certification needed depends on the type of appliances being recycled. Visit the EPA Web site: www.epa.gov/Ozone/title6/608/technicians/index.html for more information and for a list of approved certification programs.

Step 2: Obtain refrigerant recovery equipment

Refrigerants must be recovered from appliances prior to processing, dismantling, recycling or crushing.

For small appliances, refrigerant recovery equipment must recover at least 90% of the refrigerant in an appliance with a functioning compressor, or at least 80% of the refrigerant in an appliance with a compressor that is not functioning.

Step 3: Manage your recovered refrigerant correctly

Recover refrigerants as soon as possible after receiving appliances. When recovering refrigerants make sure the different types of refrigerants are not mixed. Place each type of refrigerant into its own container.

Refrigerant recovered from appliances must be sent to an EPA-certified reclaimer and cleaned before it can be sold to someone else for reuse. A list of EPA-certified reclaimers can be found at:

www.epa.gov/ozone/title6/608/reclamation/reclist.html



Step 4: Register your recovery equipment and technicians

Complete the form entitled, "Refrigerant Recovery or Recycling Device Acquisition Certification Form," at:

www.epa.gov/ozone/title6/608/recoveryform.pdf and send it to EPA's regional office in Seattle. The address is located on the back of the form.

Step 5: Keep accurate, up-to-date records

Keep copies of the technicians' certifications at the place of business or work site, if different. Keep copies of the "Verification of Refrigerant Removal" form at the place of business or work site, if different, for at least three years.

When appliances arrive at your facility with the refrigerant already removed, the supplier of the appliance must fill out the form entitled "Verification of Refrigerant Removal." This form may act as a contract (for example, between an individual and an appliance recycler or between an appliance recycler and



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a scrap metal facility) to document that the refrigerant has been removed from the appliance(s) prior to delivery.

For more information:

DEQ Headquarters, Portland

www.oregon.gov/DEQ

or phone 503-229-5913, toll-free in OR at 1-800-452-4011, ext. 5913

DEQ Regional Offices:

- Eastern Region
 - Bend: 541-388-6146
 - The Dalles: 541-298-7255
- Northwest Region
 - Portland: 503-229-5263
- Western Region
 - Eugene: 541-686-7838
 - Salem: 503-378-8240

EPA Web sites:

“Complying with the Section 608 Refrigerant Recycling Rule”

www.epa.gov/ozone/title6/608/608fact.html

“Overview of Issues on EPA Certification Test”

www.epa.gov/ozone/title6/608/technicians/certoutl.html

Other sources:

The Alliance for Responsible Atmospheric Policy
Web site:

www.arap.org/docs/rrr.html

Alternative formats

Alternative formats of this document can be made available. Contact DEQ's Office of Communications & Outreach, Portland, at (503) 229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696.