

How is your refrigerator recycled?



The majority of each unit is recycled at recycling facility in Louisville, Ky. All recycling procedures follow guidelines and best practices from the U.S. Environmental Protection Agency (EPA), allowing CenterPoint Energy to be a utility partner in the EPA's Responsible Appliance Disposal Program.

ARCA, a contractor hired to recycle refrigerators for CenterPoint Energy, safely disposes of toxins and ozone-destroying chlorofluorocarbon (CFC-11) gases from foam insulation. After capturing toxins (oils, mercury, PCBs) and ozone-depleting substances, the contractor recycles the plastic, metals, and glass in the fridge, thus limiting landfill waste.

1 Metals and plastics – Remove interior metal and plastic (crispers and shelves) when economically viable and recycle. Approximately 150 lbs. of metal and 25 lbs. of plastic are recycled.

2 Glass – Remove and crush glass shelving and ship to nearby glass recycler. The average refrigerator contains 3 lbs. of glass. Glass is typically used as aggregate material in concrete as it is tempered and cannot be mixed with typical container glass waste streams.

3 Refrigerator unit – Cut appliance to expose and remove foam. Place foam in plastic bags to prevent escape of gases.

4 Mercury-containing devices – Remove any mercury containing switches and thermostats and ship to a qualified handler for recycling. While uncommon in refrigerators, freezers may contain these devices.

5 Polyurethane foam insulation – Bagged polyurethane foam insulation is shipped to nearby waste-to-energy incinerators for complete and safe destruction. Each refrigerator contains approximately 10 lbs. of polyurethane foam and approximately 1 lb. of CFC-11. Therefore, each bag incinerated will produce 15 kWh of electricity back to the grid.

6 Oils and refrigerant – Puncture cooling circuit to simultaneously evacuate refrigerant-contaminated (CFC-12 or HFC-134a) compressor oils and refrigerant. Separate refrigerant from oils. Refrigerant is shipped to qualified handler while the oils can be recycled for use in other industrial equipment.

7 Compressor – Remove capacitors suspected of containing PCBs and ship them to a qualified handler for proper destruction.