

New Jersey's Clean Energy Program - Refrigerator/Freezer Recycling Program

Process

Pick-up process for Contractors

- Cut the power cord
The power cord is unplugged and cut for safety purposes.
- Smash the cold control (thermostat)
- Cut all door gaskets off
- Mark a large, black X on the refrigerator
This X will indicate that the refrigerator is not for resale.
- Write tracking number on the unit

Recycling process

- Test for insulation
Drill a 1-inch core sample to determine the type of insulation that the refrigerator contains.
- Chemical and oil recycling
Puncture cooling circuit to evacuate refrigerant-contaminated (CFC-12 or HFC-134a) compressor oils and refrigerant. Heat oils to distill refrigerant and ship refrigerant to qualified handler; oils can be recycled for use in other industrial equipment.
- Capacitor removal
Remove capacitors suspected of containing PCBs and ship them for destruction by an approved hazardous waste incinerator.
- Refrigerator unit
Cut appliance into multiple pieces so metal, plastic and foam can be separated. Ship separated plastics and metals to a local handler for resale in recycled commodities markets. Place foam in large plastic bags and seal to prevent escape of gasses.
- 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.
- Metal recycling
Metal is placed in a large roll-off dumpster and sent to a metal recycler.
- Plastic recycling
Plastic is chipped and shipped to a recycling center.
- Glass recycling
Glass shelves are crushed and sent to a glass recycler for use as an aggregate in concrete.
- Mercury-containing devices
Mercury-containing switches and thermostats are removed and shipped to a qualified handler for recycling.

