
Discarded Appliance Demanufacturing

Iowa Waste Reduction Center / University of Northern Iowa
319-273-8905

IAC 567-118 (455B)

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Do these regulations apply to my operation?

All appliances must be demanufactured before being recycled or disposed of.

Any person or facility wanting to engage in the demanufacturing of discarded appliances must obtain a permit prior to starting operation. These rules do not apply to appliance service and repair shops unless they are in the business of demanufacturing discarded appliances. Also, they do not apply to the removal of capacitors, refrigerants, or components containing mercury during the maintenance or service of equipment containing such items.

Definitions

Appliance - means household and commercial devices such as refrigerators, freezers, kitchen ranges, air conditioning units, dehumidifiers, gas water heaters, furnaces, clothes washers, clothes dryers, dishwashers, microwave ovens, and commercial coolers with components containing mercury, refrigerants, or PCB-containing capacitors.

Demanufacturing – means the removal of components including, but not limited to, PCB-containing capacitors, ballasts, mercury-containing components, fluorescent tubes, and refrigerants from discarded appliances.

Discarded – means no longer to be used for the original intended purpose.

Permit Requirements

Any person that plans to engage in the demanufacturing of discarded appliances must obtain an **Appliance Demanufacturing Permit** from the Iowa Department of Natural Resources (IDNR) prior to starting operation.

Permit Application Requirements

The permit application must contain the following information and be submitted with an IDNR Form 542-8006 - <http://www.iowadnr.gov/Portals/idnr/uploads/forms/5428006.doc>.

General Requirements

Storage and Handling of Appliances Prior to Demanufacturing

- No method of collecting, storing or handling discarded appliances may be used which in any way damages, cuts or breaks refrigerant lines and compressors, capacitors, or mercury-containing components or may cause a release of refrigerant, PCBs or mercury into the environment.
- No more than 1,000 discarded appliances may be stored at a location prior to demanufacturing.
- No discarded appliances may be stored for more than 270 days prior to demanufacturing

Removal and Disposal Requirements for Fixed Facilities and Mobile Operations

- Demanufacturing of appliances must take place on an impervious floor (including but not limited to concrete, ceramic tile, or metal). Wood floors are not acceptable.
- The point of demanufacturing must be located at least 50 feet from a well and /or surface water. A permanent facility must meet local zoning ordinances.
- The point of demanufacturing must be located above the 100-year floodwater elevation.
- An applicant must establish a unique marking system, to be submitted with the permit application for DNR approval, signifying that all refrigerants, PCB-containing articles, and mercury-containing components have been removed. The unique marking system must be a minimum of nine inches by nine inches and must be applied to the appliances after demanufacturing.

Inspections

Facilities will be inspected by DNR prior to issuance of a demanufacturing permit. This following form will be used during this inspection:

<http://www.iowadnr.gov/Portals/idnr/uploads/forms/5420140.doc>.

Training

At least one owner or employee of an appliance demanufacturing facility must have a training certificate from a DNR-approved training course. A person who has completed the approved training course must be on site at all times when appliances are being demanufactured.

Contact the IDNR at (515)-281-7982 or the IWRC to find out when and where the next training course will be.

Recordkeeping and Reporting

A permitted appliance demanufacturing facility shall keep records that will allow completion of an annual report to be submitted to the DNR on the following form by January 31st for the prior calendar year: <http://www.iowadnr.gov/portals/idnr/uploads/forms/5428005.pdf?amp;tabid=834>.

Shredding of Appliances

No person or facility in the state may shred, crush or bale any appliances that have not been demanufactured. Fluff from the shredding of demanufactured appliances must be sampled quarterly, at a minimum, and analyzed for the presence of PCBs and the toxicity characteristic leaching procedure (TCLP) for the 8 heavy metals (i.e., arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver).

Hazardous Materials – Hazardous Waste - Refrigerants

Any person or business engaged in demanufacturing of appliances must be in compliance with all federal and state laws relating to the management and disposition of all hazardous wastes, hazardous materials and refrigerants. For further information contact the IWRC.

Financial Assurance

Permitted appliance demanufacturing facilities must obtain and submit a financial assurance instrument to the DNR in accordance with regulations contained in 567-118.16. A copy of this regulation and all others relevant to appliance demanufacturing by be found at: <https://www.legis.iowa.gov/docs/ACO/chapter/567.118.pdf>.