



Minnesota
Pollution
Control
Agency

Managing Empty Containers

Hazardous Waste #4.16, May 2000

This fact sheet is intended for generators of hazardous waste that need to safely dispose of empty containers.

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Environmental Concerns

Just because a container is empty does not mean that it can always be thrown in the trash. Some containers may have more health and safety concerns because of the kinds of material they held. This fact sheet will help you determine the correct way to manage your empty containers.

Waste Prevention

Before you buy new products, think about how you'll have to manage the empty containers. Can you purchase the material in containers that can be returned and refilled? Can the empty containers be reconditioned and reused? Can they be recycled? Without purchasing more than you need, can you buy the product in one large container rather than several small ones? Making wise purchasing choices up front can reduce the amount of waste you must manage. Recycle empty containers whenever possible.

Containers that held Nonhazardous Waste

These containers are exempt from the hazardous waste rules. Reuse and/or recycle, when possible, or manage them as an industrial solid waste. Note: Not all nonhazardous waste is acceptable for disposal as an industrial solid waste. Check with your solid waste hauler/recycler to determine whether your waste is acceptable and whether there are other conditions you must meet.

Containers that held Acute Hazardous Waste

Acute hazardous waste is waste that is:

- one of the following F-listed wastes: F020, F021, F022, F023, F026 or F027; or
- a P-listed waste such as cyanide compounds or nitroglycerin.

Empty containers that once held acute hazardous waste are exempt from the hazardous waste rules if one of these three conditions has been met:

1. the container or inner liner has been triple-rinsed* using a solvent that is able to remove remaining residue; OR
2. the container or inner liner has been cleaned by another equally effective and approved method; OR
3. the inner liner that was in contact with the acute hazardous material has been removed from the container.**

*Triple-rinse means to flush the container three times, each time using a volume of solvent equal to approximately ten percent of the container's capacity. Collect the rinse material and use as product, or manage it as a hazardous waste.

**Manage these inner liners as hazardous waste.

Containers that held Pesticides

Empty pesticide containers are subject to Minnesota Department of Agriculture regulations. These containers must be triple-rinsed* (see above) prior to disposal or



salvage. Some manufacturers have designed new containers that reduce waste, such as dry pesticide containers designed to dissolve when the containers of pesticide are mixed with water. Check with your supplier to see what is available.

Containers that held Compressed Gas

Compressed-gas cylinders are considered empty when the pressure in the container approaches atmospheric pressure. Empty compressed-gas cylinders are exempt from hazardous waste rules.

Aerosol Containers

Aerosol containers that held paints, spray solvents, cleaners, etc. are empty when there is no product in the container and no pressure remaining. Unless you have a puncturing device and personnel trained to use it, do not puncture aerosol containers. For more information, see Hazardous Waste fact sheet # 4.00, *Managing Waste Aerosols*.

Containers that held other Hazardous Waste

Hazardous waste containers (other than those that held acute hazardous waste, pesticide or compressed gas) are empty and exempt from the hazardous waste rules if all waste that can be removed has been removed, and one of these three conditions has been met:

1. no more than 1 inch of residue remains on the bottom of the container or liner; OR
2. no more than 3 percent material by weight remains inside a container or inner liner having a total capacity of 110 gallons or less; OR
3. no more than 0.3 percent material by weight remains inside a container or inner liner having a total capacity of over 110 gallons.

Your solid waste hauler/recycler may have additional requirements you must meet before these containers are acceptable for management as an industrial solid waste.

Preparing Empty Containers for Recycling/Disposal

Generators are responsible for their waste and should consider the following when preparing the containers for recycling or disposal:

- certification that the containers are empty;
- lids or caps are removed;
- containers hold no free liquids; and
- hazard and warning labels are removed or blocked out once the containers have been cleaned for recycling/disposal. (If you can't remove the label, spray over it with dark spray paint.)

Check with your hauler/recycler to determine whether they have additional requirements.

More Information

Your metropolitan county and the Minnesota Pollution Control Agency have staff available to answer waste management questions. For more information, contact your metropolitan county hazardous waste office or the MPCA office closest to your county.

Department of Agriculture staff can provide assistance on managing waste pesticide containers. Call, or visit their web site for more information.

Metro County Hazardous Waste Offices

Anoka County	(763) 422-7093
Carver County	(952) 361-1800
Dakota County	(952) 891-7020
Hennepin County	(612) 348-8100
Ramsey County	(651) 773-4466
Scott County	(952) 496-8177
Washington County	(651) 430-6655

Minnesota Pollution Control Agency

Toll free	(800) 657-3864
Brainerd	(218) 828-2492
Detroit Lakes	(218) 847-1519
Duluth	(218) 723-4660
Marshall	(507) 537-7146
Rochester	(507) 285-7343
St. Paul	(651) 297-2274
Willmar	(320) 214-3786

Web Site <http://www.pca.state.mn.us>

Minnesota Department of Agriculture

Pesticides	(651) 297-5296
Toll free	(800) 967-2474
Web Site:	http://www.mda.state.mn.us