

Waste aerosols and compressed gas cylinders

Guidance for generators and collection sites

What are waste aerosols?

Aerosols are chemical products, such as paint, solvent, or cleaner, released as a spray or stream from a pressurized container. A waste aerosol is an aerosol container that will no longer be used for its intended purpose. Defective aerosols that are not used but instead returned new to the manufacturer or distributor are not considered wastes in Minnesota. The Minnesota Pollution Control Agency (MPCA) regulates accumulation and disposal of waste aerosols and compressed gas cylinders.

Many waste aerosols and compressed gas cylinders contain unused chemical product and excess propellant even if they seem 'empty'. Examples may include aerosols that will no longer spray evenly or fuel cylinders that will not support a usable flame. Waste aerosols and gas cylinders may be hazardous because the:

- Liquid product is hazardous
- Gas propellant or product is hazardous, usually for ignitability

Assume all waste aerosols and compressed gas cylinders are hazardous until you have evaluated and documented that they are non-hazardous or meet the strict definition of an empty container.

How do I evaluate waste aerosols as non-hazardous?

For guidance on evaluating your waste aerosols, see MPCA fact sheet #w-hw1-01, Evaluate Waste, at <https://www.pca.state.mn.us/sites/default/files/w-hw1-01.pdf>.

Using less toxic chemical aerosol products, aerosols with non-ignitable propellants, or refillable containers can significantly reduce the amount of hazardous waste aerosols and gas cylinders you generate. Contact the Minnesota Technical Assistance Program (MnTAP) for assistance. See [More information](#) on page 3.

How do I show waste aerosols and gas cylinders are empty containers?

Some waste aerosols and gas cylinders may meet the strict definition of an empty container. To be classified as empty, they must meet these three criteria:

1. Contain no compressed ignitable gas propellant or product (i.e. will not release pressure through an open, working valve or the propellant is not ignitable).
2. All liquid product that can be dispensed through the valve has been (i.e. will not spray product through an open, working valve).
3. Less than 3% of the product capacity of the container remains.

Waste aerosols and gas cylinders that meet these standards are sometimes referred to as "RCRA-empty" (RCRA stands for the *Resource Conservation and Recovery Act* – the federal hazardous waste law). Empty containers are exempt from hazardous waste and universal waste requirements. However, many solid waste haulers choose not to accept them. Check with your solid waste hauler.

Because documenting that an aerosol container or gas cylinder meets this standard can be impractical, the MPCA will allow you to assume that an aerosol container is empty when **both** the following conditions are met:

- No liquid is felt or heard when the container is shaken by hand.
- No gas or liquid is released when the spray/discharge valve is activated and the container rotated through all directions, as long as the valve is not observably or known to be clogged.

How do I store and dispose hazardous waste aerosols and gas cylinders?

You may manage hazardous waste aerosols and gas cylinders that are not empty equivalent to universal wastes in Minnesota.

Accumulate hazardous waste aerosols and gas cylinders in closed containers labeled with one of these phrases:

- Universal waste aerosols/gas cylinders (whichever is appropriate)
- Waste aerosols/gas cylinders
- Used aerosols/gas cylinders

Accumulate hazardous waste aerosols/gas cylinders for no more than one year from the date you generated them or received them at your site. Mark the aerosols/gas cylinders or their containers with the generated or received date or keep records to verify how long you have accumulated them.

You may ship hazardous waste aerosols/gas cylinders without a hazardous waste manifest to any site that has agreed to accept and properly manage them. Hazardous waste aerosols/gas cylinders may not be placed into normal solid waste. Though shipment or disposal receipts are not required, the MPCA strongly recommends you obtain these, as you are responsible for proper management of your waste. Most hazardous waste disposal facilities will reclaim the scrap metal from hazardous waste aerosols/gas cylinders after their contents are properly treated.

For more information about universal waste requirements, see MPCA fact sheet #w-hw4-62, Universal Wastes, at <https://www.pca.state.mn.us/sites/default/files/w-hw4-62.pdf>.

Can I puncture or vent waste aerosols or gas cylinders?

You may puncture any waste aerosols or gas cylinders as long as you:

- Collect and properly manage all liquid residuals. Manage residuals as hazardous wastes unless you evaluate them as non-hazardous. For guidance on evaluating your liquid residuals, see MPCA fact sheet #w-hw1-01, Evaluate Waste, at <https://www.pca.state.mn.us/sites/default/files/w-hw1-01.pdf>.
- Meet any applicable Minnesota State Fire Code requirements. For questions on fire code requirements, contact your local fire chief or the State Fire Marshal's Office. See [More information](#) on page 3.
- Meet all applicable employee occupational safety and health protection requirements. For questions on employee protection requirements, contact Minnesota Occupation Safety & Health (MNOSHA). See [More information](#) on page 3.

The MPCA is rescinding the previously announced January 1, 2018, sunset of the allowance to puncture hazardous waste aerosols and compressed gas cylinders.

The deliberate release of hazardous waste propellant or compressed gas to the atmosphere by puncturing is prohibited by the Minnesota Rules, but for many years the MPCA has chosen not to enforce this prohibition and to allow puncturing. While the MPCA is continuing the allowance to continue puncturing, there are now more management opportunities for unpunctured aerosols and cylinders. To help attain air quality goals protecting the health of all Minnesotans, the MPCA strongly encourages all businesses to consider non-puncturing aerosol and cylinder management options.

Charcoal and activated carbon filters attached to many commercial puncturing devices do not effectively capture hazardous waste propellants or gases for proper disposal or on their own protect your employees or the environment.

What about pharmaceutical aerosols?

Healthcare providers may manage business-generated waste pharmaceutical aerosols, such as asthma inhalers and anesthetic sprays, under the allowances discussed in this fact sheet, or instead under the pharmaceutical reverse distribution allowances discussed in MPCA fact sheet #w-hw3-36b, Reverse Distribution of Pharmaceuticals, at <https://www.pca.state.mn.us/sites/default/files/w-hw3-36b.pdf>.

Long term care facilities and pharmacies collecting pharmaceuticals from households may instead manage collected pharmaceutical aerosols under household pharmaceutical collection allowances discussed in MPCA fact sheet #w-hhw2-07, Collecting Pharmaceuticals from Households and Long Term Care Facilities, at <https://www.pca.state.mn.us/sites/default/files/w-hhw2-07.pdf>.

More information

Guidance and requirements in this fact sheet were compiled from Minn. R. ch. 7045, and incorporate regulatory interpretation decisions made by the MPCA on April 4, 2014, June 10, 2015, and December 7, 2017. Visit the Office of the Revisor of Statutes at <https://www.revisor.mn.gov/pubs> to review Minnesota Rules.

Contact your Metropolitan County or the MPCA with your questions. The MPCA's Small Business Environmental Assistance Program can also provide free, confidential regulatory compliance assistance.

Metro County Hazardous Waste Offices

Anoka	763-324-4260
.....	https://www.anokacounty.us/
Carver	952-361-1800
.....	http://www.co.carver.mn.us/
Dakota	952-891-7557
.....	https://www.co.dakota.mn.us/
Hennepin	612-348-3777
.....	http://www.hennepin.us/
Ramsey	651-266-1199
.....	https://www.ramseycounty.us/
Scott	952-496-8177
.....	http://www.scottcountymn.gov/
Washington	651-430-6655
.....	https://www.co.washington.mn.us/

Minnesota State Fire Marshal

Statewide	651-201-7200
.....	https://dps.mn.gov/divisions/sfm/

Minnesota Occupational Safety & Health

Toll free	1-877-470-6742
Metro	651-284-5050
.....	http://www.dli.mn.gov/mnosha.asp

Minnesota Pollution Control Agency

Toll free (all offices)	1-800-657-3864
All offices	651-296-6300
.....	https://www.pca.state.mn.us/

Minnesota Duty Officer

Toll free	1-800-422-0798
Metro	651-649-5451

Small Business Environmental Assistance Program

Toll free	1-800-657-3938
Metro	651-282-6143
.....	https://www.pca.state.mn.us/sbeap/

Minnesota Technical Assistance Program

Toll free	1-800-247-0015
Metro	612-624-1300
.....	http://www.mntap.umn.edu