



AEROSOL CAN MANAGEMENT

Delaware Department of Natural Resources and Environmental Control,
Solid & Hazardous Waste Management Section

What are aerosol cans and who generates them?

Aerosol cans are commonly known as spray cans; these are used to dispense a product under pressure as a fine spray.

A wide variety of industries, businesses, governmental agencies, and schools use aerosol cans. Many cleaners, lubricants, paints, solvents, and pesticides are packaged in aerosol cans. In addition, households commonly generate aerosol cans; however, households are exempt from the hazardous waste regulations. DNREC recommends that households properly dispose of their empty aerosol cans by recycling. For unused or partially full cans, DNREC recommends households take those containers to household hazardous waste collection centers. Visit www.dswa.com to find a collection center.

Environmental Concerns

Aerosol cans contain both the product and a pressurized propellant. These products may have hazardous characteristics, such as ignitability (e.g. paints or lubricants) or toxicity (e.g. pesticides or chlorinated cleaning products). Additionally, most aerosol containers pose an ignitability hazard because they contain highly flammable propellants such as propane and butane. Finally, the pressurized aerosol cans themselves may present a safety hazard under heat and/or pressure if not properly managed.

Determining if Aerosol Cans are Hazardous Waste

It is the responsibility of the generator to determine whether the aerosol can is hazardous waste. It is important to remember that there are three potential hazards: the product in the can, the can itself, or the gaseous propellant. If the generator cannot show that all three elements are non-hazardous waste, then the generator must manage the aerosol can and its contents as hazardous waste. Due to the construction

of an aerosol can and the wide range of potential contents, it can be extremely difficult to make a non-hazardous waste determination.

Managing and Disposing as Hazardous Waste

One option is to assume that the can, any leftover product in the can, and its propellant are listed or characteristic hazardous waste and manage and dispose according to hazardous waste regulatory requirements. If this option is followed, the generator must (in addition to following all the hazardous waste regulations):

- Accumulate all discarded cans in a container in good condition;
- Keep container closed unless adding or removing an aerosol can;
- Label the container with the words "Hazardous Waste;" and
- Count the waste towards the total amount of monthly waste generation for their generator status.

Depending on generator status, the appropriate regulations must be followed. For example, for small and large quantity generators, satellite and accumulation area regulations must be observed:

- If stored in a satellite area, locate the container at or near the point of generation of the waste aerosol cans and do not exceed a total of 55 gallons of hazardous waste in the satellite area; or
- If stored in an accumulation area, date the containers and comply with appropriate accumulation time periods.

It is not sufficient to empty the aerosol can through normal use and then recycle the can. In order to recycle the aerosol can, please see Puncturing Cans and Recycling, below.

Puncturing Cans and Recycling

Another option is to use an aerosol can puncturing device to completely empty aerosol cans of product, release all gaseous propellants, and eliminate the danger of can explosion due to heat and/or pressure. After puncturing, the generator must recycle the punctured can. A non-hazardous determination is not necessary for the punctured can due to the recycling exemption to the hazardous waste regulations (however, if a generator chooses to puncture, then they must recycle). Businesses may use DSWA recycling centers to recycle punctured cans. DNREC strongly encourages generators puncturing and recycling as opposed to disposing the cans as a hazardous waste.

A hazardous waste determination must be made on the drained liquid from the cans. If it can be shown that the liquid is non-hazardous, then the generator may dispose of the liquid as solid waste; however, otherwise the liquid must be disposed of as hazardous waste. See the section above on requirements for hazardous waste. Additionally, the can puncturing device contains a filter, which may also be considered hazardous waste.

Can puncturing is not considered a regulated treatment activity as long as the puncturing does not release any hazardous constituents into the environment and all contents are collected into a container. Most commercially available puncturing devices will meet these requirements. Additionally, to not be considered a regulated treatment activity, the punctured can must be recycled.

An advantage to utilizing can puncturing is to greatly reduce a generator's volume of hazardous waste generated. Instead of a generator collecting cans of hazardous waste, a generator would only need to collect the small amount of drained fluid from puncturing. In addition, recycling the cans and reducing the amount of hazardous waste generated is the more environmentally sound option.

More Information

State hazardous waste regulations are in 7 DE Admin Code 1302, Delaware's *Regulations Governing Hazardous Waste*, Parts 260-266, 268.

<http://regulations.delaware.gov/AdminCode/title7/1000/1300/1302/index.shtml>

For more assistance, contact DNREC, Solid and Hazardous Waste Management Section at 302-739-9403 or Karen J'Anthony, Program Manager, at karen.janthony@state.de.us