

Focus On: Aerosol Can Management





Figure 1: Dangerous waste aerosol cans pose a risk to workers and the environment.

Contact information

Central Region Office: 509-575-2490 **Eastern Region Office:** 509-329-3400 **Northwest Region Office:** 206-594-0000 **Southwest Region Office:** 360-407-6300

ADA accessibility

To request an ADA accommodation, contact Ecology by phone at 360-407-6700 or email at <u>hwtrpubs@ecy.wa.gov</u>, or visit <u>ecology.wa.gov/accessibility</u>. For Relay Service or TTY call 711 or 877-833-6341. This guidance will help you properly manage waste aerosol cans, which contain or have contained paints, solvents, and other commonly used products.

Why do we care about aerosol cans?

Aerosol spray cans are easy to use but their disposal may pose special risks to workers and the environment. The contents of full and partially full cans are under pressure, often toxic, and may be flammable or explosive under certain conditions. Carefully evaluate aerosol can disposal practices at your business to ensure you properly handle this potential dangerous waste (DW) stream.

When is a can empty?

Dangerous waste

The Washington Department of Ecology (Ecology) considers a DW aerosol can empty when it is completely sprayed out and minimal or no product remains in the can. Most empty aerosol cans are **not** regulated as DW by Ecology. For common 6-ounce to 16-ounce spray cans, the container is empty when all of these conditions are met:

1. All wastes in it are removed using practices commonly employed to remove materials from that type of container or inner liner (i.e., puncturing a can and collecting the liquids).



- Residue remaining doesn't exceed 3 percent by weight or more than 1 inch. A simple shake test may be sufficient to determine this. Do not spray out contents to empty the can. If possible, use any remaining aerosol product for its intended purpose.
- 3. The pressure inside the container is equal or nearly equal to atmospheric pressure.

Acutely hazardous waste (AHW) and extremely hazardous waste (EHW)

We recommend handling aerosol cans that held AHW or EHW as DW. These are **not** considered empty, unless the container or inner liner has been rinsed at least three times with an appropriate cleaner or solvent. We do **not** encourage triple rinsing since it creates more DW and can lead to unnecessary chemical exposure. Separate aerosol cans that held AHW or EHW from other types of aerosol cans and send them to a facility permitted to receive these wastes. Aerosol cans may be considered AHW or EHW if they contained:

- Discarded commercial chemical products identified as a "P" listed waste according to WAC 173-303-9903.¹
- Toxic EHW as defined in WAC 173-303-100.²
- Pesticides with a "Danger" or "Warning" label.
 These are the most common products that become EHW or AHW.

What should I do with non-dangerous waste cans?

We do not consider partially full cans with non-DW contents or propellants (for example, aerosol food products) to be DW. Avoid placing partially full cans in the trash. We recommend recycling empty cans as scrap metal. Ask your metal recycler if they require you to puncture and drain cans before accepting as scrap metal.

You must:

- Collect full or partially full DW aerosol cans in a closed, labeled container or label each aerosol can.
- Keep containers of collected liquids closed and in secondary containment.
- Label any collected liquid waste according to <u>DW regulations</u>³ to avoid compliance violations.
- Post emergency information near the phone or DW accumulation area if you operate as a medium quantity generator.
- Maintain a written contingency plan if you operate as a large quantity generator.

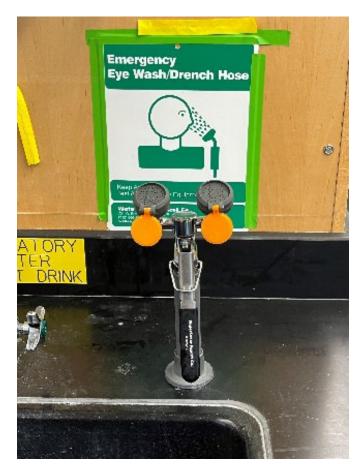


Figure 2: Clearly label eyewash stations in case of emergency.

¹ https://app.leg.wa.gov/WAC/default.aspx?cite=173-303-9903

² https://app.leg.wa.gov/WAC/default.aspx?cite=173-303-100 ³ https://ecology.wa.gov/LabelDW

General dangerous waste management requirements



What should I do with DW cans?

Manage cans with DW contents in one of these ways:

- Puncture and drain on-site. Ensure you meet all <u>DW management requirements</u>⁴ before and after puncturing. Manage the drained liquids as DW and designate any filters used to capture odors and vapors. We recommend recycling punctured cans as scrap metal.
- Send intact cans off site to a permitted DW treatment, storage, and disposal facility. If possible, pull off the stem or replace the cap on collected cans. Common waste codes might include ignitable (D001), corrosive (D002), F001-F006 solvents, and "U" or "P" listed commercial chemical products. The United States Environmental Protection Agency (EPA) recommends you also evaluate aerosol cans for reactivity (D003).



Figure 3: It's important to puncture aerosol cans correctly to ensure safety and proper disposal.

Guidelines for puncturing cans

Generators may puncture aerosol cans on site for the purpose of removing and consolidating liquid residues and capturing potentially harmful volatile organic compounds (VOCs). Ecology does not consider puncturing aerosol cans to be a DW treatment activity.

- Puncturing cans may produce explosive vapors.
- Do not use any puncturing method that releases gases or liquids directly to the environment. It is against the law.
- Capture odors and potentially harmful VOCs released from punctured aerosol cans by using devices with cartridges or filters.
- Use appropriate personal protective equipment and maintain emergency response equipment near your puncturing device.
- You shouldn't puncture cans that contain or contained pesticides, herbicides, or other extremely hazardous products. Send them off site to a permitted treatment, storage, or disposal facility.

What should I use?

Use commercial puncturing devices that capture vapors. Manage the collected DW liquid residues under DW requirements. If puncturing different types of aerosol cans, avoid mixing incompatible materials.

Keep good records

We recommend keeping a log showing the types of chemicals added to the accumulation container. This helps determine which waste codes apply.

Flammable waste

If the waste is flammable, the fire department may require you to ground the containers to prevent sparking.

Do aerosol cans count towards my generator category?

Count all DW aerosol cans generated per month unless cans are intended to be punctured and drained. If you puncture and drain the cans, count only the collected liquids, not the intact cans.

⁴ https://app.leg.wa.gov/WAC/default.aspx?cite=173-303



If your puncture device's spent filter designates as DW, count the weight towards your generator category.

How do I report aerosol cans on my Dangerous Waste Annual Report?

If you are a medium or large quantity generator, report intact cans or liquids shipped off site on a Uniform Hazardous Waste Manifest on your <u>Dangerous Waste Annual Report</u>.⁵

You may have to report different waste streams. Report:

- Similar types of intact aerosol cans as a distinct waste stream. Aerosol cans with the same set of waste codes are a distinct, separate waste stream.
- Liquid mixtures collected from puncturing operations as one waste stream.

For annual reporting information call the Dangerous Waste Annual Reporting Team at 1-800-874-2022 (within WA state only), or (360) 407-6170. Email questions to <u>turbowaste@ecy.wa.gov</u>.

Upcoming Rulemaking

We plan to partially adopt <u>EPA's new rules</u>⁶ for universal waste aerosol cans. This regulatory option will make it easier for businesses to collect and recycle these wastes. We do **not** plan to allow pesticide-containing aerosol cans as universal waste.

Until new rules are available, businesses must continue to manage aerosol cans according to all applicable DW regulations.

To stay informed on Ecology's rulemaking, sign up for the Dangerous Waste email list.⁷

⁵https://ecology.wa.gov/dangerous-waste-reporting

⁶https://www.epa.gov/hw/increasing-recycling-adding-aerosol-cans-universal-waste-regulations ⁷https://public.govdelivery.com/accounts/WAECY/subscriber/new?topic_id=WAECY_38