

NEMS Guidance Protocol: Aerosol Management
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Effective Date: July 13, 2026

Applicability: All NIH Facilities, Housekeeping Staff, and Maintenance Contractors.

Regulatory Status Matrix:

Under EPA RCRA rules, aerosol cans are treated differently based on their contents and condition.

Condition of Aerosol Can	Hazardous Waste Status	Disposal Track
Completely Empty (Atmospheric pressure reached; no liquid/gas remains)	Non-Hazardous Waste	Scrap Metal Recycling (Where facilities permit)
Partially Full, Clogged, or Pressurized (Any remaining product/propellant)	Universal Waste / Hazardous Waste	Must be collected via the Division of Environmental Protection (DEP) stream

Collection & Storage Standards:

Housekeeping and maintenance activities generate high volumes of aerosols (e.g., disinfectants, lubricants, stainless steel cleaners). They must be handled under strict storage limitations to prevent fire and/or explosion risks.

	UNIVERSAL WASTE - AEROSOLS	
	[X] Housekeeping Storage Bin	
	[X] Labeled and Dated	
	[X] Keep Valve Caps Affixed	

Container Specifications:

- **Storage Bins:** Partially full or pressurized cans must be accumulated in heavy-duty, puncture-resistant plastic bins provided by the DEP.

- **Venting & Environment:** Storage bins must be kept in cool, well-ventilated areas away from direct sunlight, heat sources, or flammable solvent lockers.

- **Protection:** Plastic protective valve caps must remain on top of the cans during storage to prevent accidental discharge inside the bin.

Puncturing Regulations:

- **Strict Prohibition:** Housekeeping contractors and laboratory staff are strictly prohibited from manually puncturing, crushing, or depressurizing aerosol cans.
- **Centralized Processing:** Puncturing is only performed at authorized DEP chemical waste consolidation points using specialized, grounded, spark-proof aerosol puncturing systems equipped with carbon filters.

Step-by-Step Labeling Protocol:

Every accumulation bin used by contractors or labs must display a compliant tracking label.

Step 1: Universal Waste Labeling: The outer container must be clearly labeled with the phrase “Universal Waste – Aerosol Cans”

Step 2: Date Tracking: Write the date the first can is placed in the bin. Under the universal waste regulations, containers can be accumulated on-site for a maximum of one (1) year from this starting date.

Step 3: Point of origin clearly list the building number, room number, and the contact agency name on the tag.



Local Logistics & Pickup Execution:

- **Requesting Transit:** Once an accumulation bin is 80% full, or approaches its 1-year time limit, log into the online Chemical Waste Service (CWS) portal to request a pickup or call CWS at (301)496-4710.
- **Local Service Fleet:** The Bethesda CWS fleet provides pickup within 1 to 2 business days for the Main Campus, Twinbrook, Rockville, and Gaithersburg facilities.
- **Rejection Criteria:** Bins containing items other than aerosols (including loose liquid solvents, batteries, light tubes) will be rejected by the CWS driver.

Emergency & Accident Protocol

- **Leaking Cans:** If an aerosol can starts to hiss, leak, or bulge, immediately place it inside a local chemical fume hood if available, or isolate it in a well-ventilated space.
- **Rupture/Fire:** In the event of an aerosol can explosion or fire, activate the fire alarm, evacuate the space immediately, and call the NIH Fire Marshal or emergency services.