Duke Occupational & Environmental Safety Office

Environmental Programs Division

Aerosol Cans

Duke University, Duke University Medical Center, and Duke University Health Systems produce a variety of aerosol cans that are subject to regulatory management standards and, if improperly managed, could pose a safety risk to Duke Personnel and the environment. Aerosol cans are defined as a non-refillable receptacle containing a gas compressed, liquefied, or dissolved under pressure, the sole purpose of which is to expel a liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.

Aerosol cans frequently contain flammable propellants such as propane or butane which can cause the aerosol to demonstrate the hazardous characteristic for ignitability, and may also be a hazardous waste for other reasons when discarded. Aerosol cans that do not exhibit a hazardous waste characteristic (ignitability, corrosivity, reactivity, toxicity) or contain a substance listed as hazardous waste are not hazardous waste and therefore are not universal waste. This procedure applies to all departments at Duke University, Duke University Medical Center, and Duke University Health Systems who generate aerosol can waste.

Disposal

As of February 7, 2020 used, unused or unwanted aerosol cans used in a commercial/industrial setting are considered to be a universal waste in North Carolina under 40 CFR 273 unless the following criteria are met:

- The aerosol products have been used for their intended purposes so that when holding the cans upright and pressing down on their nozzles, not enough product comes out for them to be useful anymore;
- No more than 3% of the original net content weight remains in the cans, or no more than one inch of liquid remains in the bottoms of the cans (40 CFR 261.7(b)(1)(1) and (111);
- Although the aerosol can meets the above criteria and could be considered nonhazardous, the propellant left in the can may still be reactive under heat or pressure, which requires the can be handled as a universal waste.
- The cans did not hold chemical formulations with sole active ingredients identified in the F027 (used and unused formulations for wood preserving) or P-list hazardous waste.

Aerosol cans that are still in use are not considered a waste. Once the user decides they no longer need the can, they can submit the can to OESO Environmental Programs for proper management in accordance with the <u>Chemical Waste Management Practice</u>.