Missouri Department of Natural Resources

Aerosol Cans

4/2011

Waste aerosol cans are a challenge for businesses to manage. A business may generate one or two cans on an infrequent basis or many as processes demand. All contents of the can (product, inert ingredients, propellants and gases) may or may not be identified on the label or Material Safety Data Sheet. Cans become waste when they are empty and product can no longer be expelled, or when the product has exceeded the useful shelf life. Sometimes cans become waste when the nozzle or valve fails or the contents begin to solidify. To minimize waste disposal problems, the Missouri Department of Natural Resources encourages businesses to purchase only what is required, to follow label directions to prevent clogging, to use the product within its useful shelf life, and to purchase products that do not have hazardous characteristics. Aerosol cans and other wastes generated by households are exempt from hazardous waste regulation. A decision tree for managing aerosol cans is found on the last page of this fact sheet. Use the decision tree to identify the management strategy that applies to your situation then refer to the Waste Management Options section for details regarding the management option.

References: 40 CFR 261.7 and 10 CSR 25-5.262(l) incorporating 40 CFR 262.11.

Waste Management Options

Small and infrequent (de minimus) quantities

If your business is a conditionally exempt small quantity generator of hazardous waste and it generates one or two cans on an infrequent basis (or if you are a household or farmer), you may dispose of these in a Missouri sanitary landfill. The Missouri Hazardous Waste Law does not allow anything other than very small amounts of hazardous waste to be disposed in Missouri sanitary landfills.

Recycling

Completely empty aerosol cans that are recycled as scrap metal are exempt from most hazardous waste regulations [40 CFR 261.6(a)(3)(iii)]. Under these conditions, the can and its residual contents are not solid wastes or hazardous wastes. Non-empty aerosol cans should only be sent to a recycler or punctured in a unit at a facility that is capable of managing pressurized containers and able to properly capture and manage all vented liquids, gases and propellants.

Improper depressurization of aerosol cans is extremely dangerous, and the release of hazardous material may violate the Missouri Hazardous Waste Management Law or the Clean Air Act.

If aerosol cans are destined for scrap metal recycling, the process of emptying the cans is considered part of the recycling process, and a hazardous waste treatment permit is not required for this activity. However, any liquids or gases removed from the cans are solid wastes if they cannot be used for their intended purpose. If unusable, the collected residues must be evaluated to determine if they are hazardous (40 CFR 262.11). If the contents are hazardous, they are subject to all applicable hazardous waste regulations regarding on-site management, transportation, treatment and disposal. Even if the can and the contents are nonhazardous, Department of Transportation regulations may apply to the transportation of some cans as hazardous material. If the contents of some

cans are hazardous and the contents of others are not, the bulking and commingling of the contents is not considered illegal dilution. However, bulked contents must be evaluated for use, recycling or disposal as described above.

Satellite Accumulation

Spent aerosol cans may be kept in satellite accumulation for up one year. This allows a facility to accumulate up to a 55 gallon drum of spent aerosol cans prior to final management. If waste streams are different (such as aerosol cans with flammable paint wastes and aerosol cans with toxic insect sprays) up to 55 gallons of each waste stream may be accumulated. Facilities may consider this option when it does not generate a large number of aerosol cans in its operations and wishes to optimize time spent on emptying cans prior to recycling or disposal.

Disposal

For all aerosol cans, use as much as possible of the contents for the intended purpose. For the can to be empty, the pressure of the propellant gas should be unable to propel any more material from the can. (Note: If the nozzle or valve malfunctions, and some of the contents remain, the can is not empty.) If the can is empty of all liquids, gases, and propellants, it may be recycled or disposed in a sanitary landfill. Recycling as scrap metal is strongly encouraged. If the can is not empty, a generator must perform a hazardous waste determination on both the can and any residuals remaining in the can (liquids, gases, or propellants). If the can or the contents are hazardous waste, it must be managed under all applicable regulations including transport, treatment and disposal as a hazardous waste. Because some aerosol cans contain acutely toxic materials (such as certain types of pesticides), disposal may be the only option as triple rinsing cannot be done. On such cans, look closely at the disposal instructions on the label. If no instructions are provided, or the instructions conflict with the information provided herein, follow the guidance in this document. Although the venting of an aerosol can is not considered treatment, the captured liquids, gases or propellants may be subject to hazardous waste regulations if they cannot be used or reused without any additional processing or treatment. As previously noted, the characteristics of any unusable residues must be identified and, if hazardous, transported, treated, and disposed of according to all applicable regulations.

Please note that this guidance is not intended for use by interim status or permitted hazardous waste treatment, storage or disposal facilities.

For more information call or write:

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Aerosol Can Decision Tree