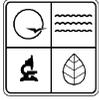


APPENDIX J

**MISSOURI DEPARTMENT OF
NATURAL RESOURCES'
TECHNICAL BULLETIN
"THE UNIVERSAL WASTE RULE IN
MISSOURI"**



The Universal Waste Rule in Missouri

What are Universal Wastes?

Universal wastes are hazardous wastes, but not all hazardous wastes can be universal wastes. In order to be a universal waste, a hazardous waste must meet certain criteria established by the Environmental Protection Agency (EPA). In general, to qualify as a universal waste a hazardous waste must be widespread, commonly found in medium to large volumes, exhibit only low-level hazards or be easily managed. It is important to note that disposal of hazardous wastes in Missouri sanitary landfills (except by households or de minimis amounts from conditionally exempt generators) has been illegal since Jan. 1, 1994 (Section 260.432 RSMo). Universal wastes in Missouri's rule include the following items:

- **Batteries**, such as nickel-cadmium (Ni-Cd) batteries, mercury, silver or lithium "button" batteries and small, sealed lead-acid batteries found in electronic equipment, mobile telephones, portable computers and emergency backup lighting. Those who generate lead-acid vehicle batteries have the option of managing their uncracked lead-acid batteries under the provisions of Title 40 of the Code of Federal Regulations (CFR) Part 266.80 or the Universal Waste Rule, in 40 CFR Part 273;
- **Pesticides** that have been recalled or banned from use, are obsolete, have become damaged or are no longer needed due to changes in cropping patterns or other factors. These have often been stored for long periods of time at businesses or in sheds or barns. In Missouri, pesticides cannot be sent to other universal waste handlers, but may be sent to a universal waste pesticide collection program, to a Missouri Certified Resource Recovery Facility or to a Universal Waste Destination Facility. Missouri does not allow transmission of pesticides between handlers due to the high toxicity level of these wastes and the belief that additional controls are necessary to assure adequate protection of human health and the environment when these wastes are handled. In addition, universal waste pesticide collection programs in Missouri must comply with the "Standard Operating Procedures for Universal Waste Pesticide Collection Programs in Missouri" that are referenced in the rule. Pesticides may be transmitted between pesticide collection programs that are in compliance with the rule. Missouri also added an option for allowing Missouri Certified Resource Recovery Facilities to accept pesticides if their certifications allow;
- **Thermostats**, mercury switches and mercury containing thermometers and manometers that are found in homes and commercial, industrial, agricultural and community buildings; and
- **Mercury containing lamps** that include fluorescent, high-pressure sodium, mercury vapor, metal halide and high intensity discharge (HID) lamps.



Mercury switches, mercury-containing thermometers and manometers were added by Missouri to the original list of wastes (i.e., thermostats, batteries and pesticides) that may be managed under the provisions of the Universal Waste Rule. Hazardous incandescent lamps were added to federal universal waste regulations adopted by Missouri effective Nov. 30, 2001.

What is the Universal Waste Rule?

The Universal Waste Rule is a set of federal environmental regulations adopted with modifications by Missouri. The effective date of the rule in Missouri was Jan. 31, 1999. The rule can be found in Chapter 16 of the *Missouri Hazardous Waste Management Regulations*, which references portions of 40 CFR Part 273. This rule identifies all universal wastes in Missouri and states how they can be handled in a lawful manner. To completely understand the rule, you should read both state and federal regulations, because the state often references the federal standards. The rule was designed to give generators of certain types of hazardous wastes an option to manage those wastes under less stringent Universal Waste Rule requirements rather than by the more stringent existing hazardous waste regulations. This alternative is offered to help reduce the regulatory burden on businesses and others that generate certain common hazardous wastes and to encourage collection, recycling and proper disposal of these wastes.

By reducing administrative requirements, this rule is expected to save companies compliance costs and to reduce the amount of time spent on paperwork. The rule is expected to encourage collection and recycling programs, that will result in more options to businesses, farmers and households for legal and cost-effective management and disposal of universal wastes. The wastes covered under this rule are described in the “*What are Universal Wastes*” section of this bulletin.

Note: The management options noted in the Missouri Department of Natural Resources’ Technical Bulletin, *Waste Fluorescent Lamp Management for Businesses and Institutions* previously published in 1996, ended on Jan. 31, 1999. The options allowed by the Universal Waste Rule make the guidance in this older version of the lamp bulletin obsolete. The Department requests individuals and businesses to recycle their copies of this bulletin and replace it with the current version dated 7/2003, entitled “*Fluorescent Lamps technical bulletin (Mercury-containing lamps including fluorescent, neon, high-pressure sodium outdoor, high intensity, and metal halide lamps)*”. The lamp bulletin for households and farmers is also being revised to include guidance for managing other universal wastes and will state that households and farmers also have the option of managing their wastes according to the provisions of the Universal Waste Rule if they wish.

What are the Basic Requirements for Managing Universal Wastes?

Anyone who wants to manage one or more of the universal wastes noted above under the Universal Waste Rule must determine his or her handler status. Large quantity handlers accumulate 5,000 kilograms (equivalent to 11,000 pounds) or more of universal waste (batteries, pesticides, mercury containing thermostats, switches, lamps, thermometers, and manometers, calculated collectively), at any time (approximately five to six tons), and small quantity handlers accumulate less than 11,000 pounds. The handler counts only those wastes that will be managed as universal wastes. All other hazardous wastes are calculated separately and determine the “hazardous waste generator status” of the business. The designation as a large quantity handler remains through the end of the calendar year in which the 11,000 pounds is accumulated.

Large and Small Quantity Handlers

- must not dispose of a universal waste into the environment.
- must not dilute or treat a universal waste or break or crush mercury containing lamps without a Missouri Resource Recovery Certification or permit.
- must follow the waste management requirements stated in the rule for the particular waste(s) being managed.
- small quantity handlers generating only universal wastes that they manage under this rule do not need to register or obtain an EPA identification number; large quantity handlers must register and obtain an EPA identification number if a number has not previously been obtained.
- must prevent releases to the environment.
- must label waste as a “universal waste” as described in the rule.
- may accumulate universal wastes on-site for up to one year.
- may accumulate universal wastes for more than one year for the sole purpose of facilitating proper recovery or disposal.
- may accept universal wastes from off site and keep them for up to one year (except for universal waste pesticides).
- must train employees on proper handling and emergency procedures.
- must respond to spills and manage the spill residue as hazardous waste.
- may self-transport the universal waste to an authorized destination facility or Missouri Certified Resource Recovery Facility (or for pesticides, to a Missouri Pesticide Collection Program). If self-transporting, the handler is required to meet universal waste transporter requirements in the rule.
- small quantity handlers need not keep records of universal wastes received or shipped; large quantity handlers have recordkeeping requirements.
- must comply with export requirements for foreign shipments if applicable.

Transporters

- must not dispose of universal waste into the environment.
- must not dilute or treat except to respond to spills.
- must comply with the requirements of the Universal Waste Rule for the particular waste being managed as well as U.S. Department of Transportation regulations in 49 CFR part 171 through 180 for all universal wastes being shipped that meet the definition of hazardous material in 49 CFR 171.8.
- are not required to use hazardous waste manifests (shipping papers or bills of lading are acceptable).
- may store universal waste at transfer facilities for up to 10 days.
- must respond to releases and spill residue must be managed as a hazardous waste.
- must only transport universal waste to a universal waste handler, Missouri Certified Resource Recovery Facility with authorization to accept the waste in question, destination facility or foreign destination. Pesticides must be taken to a universal waste pesticide collection program, to a destination facility, sent back to the registrant conducting the recall or to a Missouri Certified Resource Recovery facility with authorization to accept the waste in question.
- must comply with export requirements for foreign shipments if applicable.

Destination Facilities

- due to revisions in federal regulations which were effective in Missouri Nov. 30, 2001, all destination facilities, including Missouri certified resource recovery facilities, must have a Resource Conservation and Recovery Act permit for storage.
- must have an appropriate hazardous waste storage, treatment or disposal facility permit and

- comply with the terms of the permit for the management of universal waste received.
- must obtain and comply with the terms of a Missouri Certified Resource Recovery Facility authorization, if the destination facility recycles universal waste.
 - must send waste off site only to another destination facility or a foreign destination.
 - must keep records.

Who is affected by this rule?

Businesses

Universal wastes are generated by small and large businesses. In the past, businesses were required to manage universal wastes as hazardous waste. The Universal Waste Rule offers another option that eases the regulatory burden on businesses that generate these wastes by streamlining the administrative requirements. For example, certain small businesses that generate only universal wastes and manage them under this rule do not need to notify the state of their activities or pay hazardous waste fees and taxes on that waste. Further, the rule extends the amount of time that businesses can accumulate universal wastes on site to a year or more, as explained below. It also allows companies to transport the wastes with a common carrier (universal waste transporter), instead of a hazardous waste transporter, and it no longer requires companies to prepare a hazardous waste manifest (the transporter prepares a shipping paper).

In Missouri, this rule does not apply to any business that generates or accumulates less than 100 kilograms (220 pounds) of hazardous wastes per month or at any one time. Such generators are considered “conditionally exempt” from hazardous waste regulation. However, these small businesses are encouraged to participate voluntarily by using handlers and collection centers that legitimately recycle or dispose of their universal wastes. This rule will make it simpler for companies to establish collection programs and to participate in manufacturer take-back programs. Many large manufacturers and trade associations are already planning national and regional collection programs for their products.

Households

Households are not subject to hazardous waste management standards and are allowed to dispose of wastes covered under the universal waste rule with their trash. “Household waste” is defined in 40 CFR Part 261.4(b)(1). The department encourages residents to take their universal wastes to local collection centers or events when these are available for recycling or disposal.

Communities

Local communities can work with businesses and residents to encourage proper recycling or disposal of universal wastes. By easing the regulatory burden on businesses, more collection centers may become available. Communities can establish collection programs or help local businesses set up collection programs in their area based on the guidance in the rule.

How may I obtain copies of hazardous waste laws and regulations?

Copies of the Revised Statutes of Missouri are available through the Revisor of Statutes at (573) 526-1288, or are available online at www.moga.state.mo.us. Copies of the Missouri Code of State Regulations are available through the Missouri Secretary of State at (573) 751-4015, or are available online at www.sos.mo.gov. Federal regulations may be viewed at federal depository libraries, may be purchased from the U.S. Government Bookstore, the U.S. Government Printing Office, or from a commercial information service such as the Bureau of National Affairs. Federal Regulations are also available online at <http://www.access.gpo.gov/nara/cfr/index.html>.

For More Information

For more information on the Universal Waste Rule, please contact
Missouri Department of Natural Resources
Environmental Assistance Office
P.O. Box 176
Jefferson City, MO 65102-0176
1-800-361-4827 or (573) 526-6627
www.dnr.mo.gov/oac/env_assistance.htm

Hazardous Waste Program
P.O. Box 176
Jefferson City, MO 65102-0176
1-800-361-4827 or (573) 751-3176
www.dnr.mo.gov/alpd/hwp