

New Jersey's Universal Waste Rule

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November 1, 2006

Topics to be Covered

- **What is Universal Waste?**
- **Wastestreams regulated under UWR**
- **Requirements of UWR**

What is Universal Waste?

- Universal Waste is a specific hazardous waste stream that has been designated by EPA or a state as universal waste
- Only those waste streams identified in the Universal Waste Rule (UWR) may be managed as universal waste

EPA Criteria for Universal Waste

- Generated in similar quantities by businesses, industry, and consumers.
- Found in municipal solid waste stream
- Fails hazardous waste test
- Negatively impacts solid waste facility operations
- Presents low risk in collection, storage, and transportation

Universal Waste Rule

- Adopted by EPA in 1994 under RCRA
- Provides alternative management options for specific hazardous waste streams
- Originally included batteries, spent pesticides, and thermostats
- Adopted by NJ in 1996 under Recycling Regulations (NJAC 7:26A)

Federal vs State Listed UW

- Each state may choose to adopt additional waste streams as universal waste provided it meets EPA's criteria
- New Jersey has adopted the following as state listed universal waste:
 - Consumer electronics
 - Oil-based finishes

Federal and State Listed UW

Federal UW:

- Batteries
- Pesticides
- Mercury-containing Devices (includes Thermostats)
- Hazardous Waste Lamps

Additional State UW:

- Consumer Electronics
- Oil-based finishes

Definitions

- Batteries
 - means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy.
- Pesticides
 - Spent pesticides, any unused pesticides destined for disposal

Definitions (cont.)

- Hazardous Waste Lamps
 - The bulb or tube portion of an electric lighting device. Examples of common universal waste lamps include fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.
- Mercury-containing Devices
 - Any product component which uses elemental mercury, sealed in an ampule or other container, as a functional component. Examples include mercury switches and thermometers.

Definitions (cont.)

- Consumer electronics
 - Any appliance used in the home or business that includes circuitry. Includes components and subassemblies of the electronic products. Examples include computers, printers, copiers, VCRs, televisions.
- Oil-based finishes
 - Any paint or other finish which may exhibit a hazardous waste characteristic or contains a listed hazardous waste. Must be in original packaging. Examples include oil-based paints, lacquers, stains, and aerosol paint cans.

Non-Hazardous Waste Consumer Electronics

- If electronic equipment is classified as non-hazardous waste, it may be managed under the Solid Waste Regulations.

or

- Non-hazardous waste electronics may be recycled at a Class D Recycling Center.

Latex Paint

- Latex paint is usually a non-hazardous waste and therefore cannot be a universal waste.
- Latex paint may be managed as a Class D recyclable material provided the management requirements for oil-based finishes are followed.

Management of Universal Waste

- Universal Wastes **do not** have to be stored in a hazardous waste 90-day accumulation area
- Universal Wastes **do not** count toward hazardous waste generation amounts
- Universal Wastes **do not** have to be transported by a hazardous waste transporter using a hazardous waste manifest

Management of Universal Waste

- Universal Waste Handlers
 - a generator of universal waste, or
 - the owner or operator of a facility that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

Universal Waste Handlers

Two categories of Universal Waste Handlers:

- **Small Quantity Handlers** - Accumulate less than 5,000 kilograms (11,000 lbs) of universal waste (combined) at any given time
- **Large Quantity Handlers** - Accumulate more than 5,000 kilograms (11,000 lbs) of universal waste (combined) at any given time

Universal Waste Handlers

- Requirements for **All** Handlers
 - All universal waste must be labeled
 - Cannot be accumulated for longer than one year
 - Must maintain records to prove material has been accumulated for less than one year
 - UW must be sent to another handler or a destination facility
 - May not open containers of oil-based finishes

Universal Waste Handlers

- Requirements for **All** Handlers (cont'd)
 - Must contain all releases of universal wastes
 - Must determine if any material resulting from a release is a hazardous waste and manage appropriately
 - May export materials to foreign destinations but must comply with portions of 40 CFR 262 Subpart E - Exports of Hazardous Waste

Universal Waste Handlers

- Small Quantity Handlers
 - Limited processing allowed:
 - Removal of mercury ampules from mercury-containing devices allowed with restrictions
 - Demanufacture of consumer electronics allowed
 - Must inform employees of proper handling and emergency procedures

Universal Waste Handlers

- Large Quantity Handlers
 - Must notify the Department of activities and obtain an EPA ID# for universal waste
 - Limited processing allowed
 - May remove mercury ampules from mercury-containing devices with restrictions
 - May **not** demanufacture electronics
 - Must ensure all employees are thoroughly familiar with proper handling and emergency procedures

Universal Waste Handlers

- Large Quantity Handlers (cont.)
 - Must maintain records of receipt of material and shipments off-site
 - May be a log, invoice, manifest, bill of lading, or other shipping document
 - Must include name and address of originating handler or destination facility, quantity and type of material and date of receipt or shipment
 - Must retain records on-site for at least three years

Management of Universal Waste

- Universal Waste Transporters
 - a person engaged in the off-site transportation of universal waste by air, rail, highway, or water
- Universal Waste Destination Facility
 - either a RCRA treatment, storage, and disposal facility (TSDF) or a Class D recycling center

Universal Waste Destination Facilities

- Regulated as either a RCRA TSDF if treating or disposing of waste or a Class D recycling center if recycling the waste
- Recyclers must obtain a Class D recycling center approval to recycle universal waste
- Examples of recycling:
 - Demanufacturing consumer electronics
 - Crushing hazardous waste lamps or computer monitors
 - Mixing and screening of paint
 - Recovery of mercury from mercury switches

New Jersey's Recycling Regulations

- Class A Recyclable Material
 - Curbside recyclables (glass, paper, plastic)
- Class B Recyclable Material
 - Construction materials (concrete, wood, tires)
- Class C Recyclable Material
 - Compostable material
- Class D Recyclable Material
 - Used oil and Universal Waste

Labeling Universal Wastes

- Universal Wastes must be labeled either by container or individually
- Handlers and Destination Facilities must label wastes
- Label must contain at a minimum the wording in the regulations (see next slides for wording)

Labeling Universal Wastes (cont.)

- Label should contain the accumulation start date
- Label may be as simple as a piece of paper taped to a pallet or may be a purchased pre-printed label
- Label must be clear, legible, and easily visible
- Class D Facilities must also label as “Class D Recyclable Material”

Labeling Universal Wastes (cont.)

- Batteries
 - Label each container batteries are accumulated in as follows:
 - “Universal Waste - Battery (ies)”
- Pesticides
 - Must have the label that was on or accompanied the product when sold and the following label:
 - “Universal Waste - Pesticide(s)”

Labeling Universal Wastes (cont.)

- Hazardous Waste Lamps
 - Label each container lamps are accumulated in:
 - “Universal Waste - Lamps”
- Consumer Electronics
 - Label each unit or each pallet or container:
 - “Universal Waste - Consumer Electronics”

Labeling Universal Wastes (cont.)

- Mercury-Containing Devices
 - Label each container mercury devices are accumulated in as:
 - “Universal Waste - Mercury-Containing Devices”
- Oil-Based Finishes
 - Label each container, tank, or pallet of oil-based finishes as:
 - “Universal Waste - Oil-Based Finishes”

Transportation of Universal Waste

- Universal wastes must be transported in accordance with the US Department of Transportation requirements
 - includes packaging, labeling, marking, placarding, and preparing shipping papers
- For guidance on DOT requirements:
 - <http://hazmat.dot.gov>
 - DOT Hotline: 1-800-467-4922

Transportation of Universal Waste (cont.)

- Universal Wastes sent to a Class D recycling center **do not** have to be transported by a NJ licensed solid or hazardous waste transporter
- Universal Wastes sent to a RCRA TSDF **must** be transported by a NJ licensed solid or hazardous waste transporter

Summary

- Universal Wastes are hazardous wastes subject to reduced management requirements
- Batteries, pesticides, hazardous waste lamps mercury-containing devices, consumer electronics, and oil-based finishes are the only universal wastes in New Jersey

Summary (cont.)

- The Federal Universal Waste Rule (40 CFR 273) has been incorporated by reference into New Jersey's regulations
- Generators and accumulators of universal waste are regulated as handlers
- Recyclers of universal waste are regulated as Class D recycling centers

Additional Information

- June 17, 2002 rule amendment prospectively incorporated by reference the Federal Universal Waste Rule -- keeps New Jersey's rule equivalent to the federal rule
- New Jersey's Recycling Regulations (NJAC 7:26A) are available on-line at:
www.nj.gov/dep/dshw/resource/rules.htm

Additional Information

- Federal Universal Waste Rule (40 CFR 273) is available on-line at www.epa.gov
- USDOT Regulations are available at hazmat.dot.gov
- NEWMOA- guidance documents are available at www.newmoa.org
 - Mercury management information
- NERC- Information on different E-waste management strategies at www.nerc.org

Contact Information

- If you have questions on New Jersey's Universal Waste Rule contact:

NJDEP

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