

Universal Waste Overview

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Today's Goals - Provide Overview of Michigan's Universal Waste Regulations

- What is a Universal Waste
- What Types of Universal Waste Are There
- Why Do The Universal Waste Regulations Exist
- What Benefits Do the Universal Waste Regulations Provide
- How Must I Manage My Universal Waste

Universal Waste – What is it?

- Certain types of commonly generated hazardous wastes that have streamlined hazardous waste accumulation standards

Federal Universal Waste Types

- Batteries
- Pesticides
- Mercury containing equipment
- Lamps

Michigan Only Universal Waste Types

- Pharmaceuticals
- Consumer electronics
- Antifreeze

Why Do the Universal Waste Regulations Exist, What's the Benefit?

- Promotes recycling and proper disposal
- Eases the regulatory burden
- Reduce generator status
- Longer accumulation period, up to one year
- Less labeling
- No hazardous waste manifest required
- Hazardous waste transporter not required

Universal Waste Entities - Four Types

- Small Quantity Handlers
- Large Quantity Handlers
- Transporters
- Destination Facilities

Universal Waste Handler – What is it?

- A person who generates universal waste
- A person who accepts and accumulates universal waste generated by others
- A person who conducts certain limited treatment and recycling activities specifically authorized under the universal waste handler regulations

Universal Waste Handler Categories - Two Levels

- Small Quantity Handler of Universal Waste:
 - Accumulates less than 5,000 kilograms (11,000 pounds) total
 - Notification and Site ID number not required
- Large Quantity Handler of Universal Waste:
 - Accumulates 5,000 kilograms (11,000 pounds) or more
 - Notification and Site ID number required

Basic Universal Waste Handler Requirements - All Universal Waste Types

- Prohibited from disposing of universal waste

Basic Universal Waste Handler Requirements - All Universal Waste Types Continued

- Prohibited from diluting or treating universal waste except as authorized by license or rule
- Must manage universal waste to avoid releases
- Employees must be informed about proper handling and emergency procedures
- Must accumulate universal waste for one year or less
- Containers must be kept closed (except consumer electronics)
- Meet individual universal waste type labeling requirements
- Need to comply with DOT shipping requirements
- Obtain agreement from receiver of universal waste
- Comply with EPA exporter requirements
- Comply with Part 121 if liquid

Universal Waste Transporter

- A person engaged in the off-site transportation of universal waste by air, rail, highway or water, including:
- A package shipping service (e.g., US Postal Service; FedEx, UPS) for solids
- A commercial carrier (e.g., a trucking company, a hauler specializing in universal waste)
- The operator of a universal waste destination facility that offers a universal waste pick-up service
- Prohibited from disposing, diluting, or treating
- Handlers can transport own universal waste to another handler or a destination facility. Same for hired transporters
- If universal waste is a liquid, comply with Part 121 and Act 138
- Comply with DOT shipping requirements
- Michigan only universal waste needs to comply with the state requirements that it passes through if it goes out of Michigan
- Can store universal waste up to 10 days at transfer facility
- If exceed the 10 day limit, the site is also a universal waste handler location subject to the handler requirements

Michigan Department of Environmental Quality		
Uniform Program for Liquid Industrial Waste Transportation Credentials		
THOMAS CYBULLA BECKMAN PRODUCTION SERVICES INC 3786 BEEBE ROAD KALKASKA, MICHIGAN 49646		
EPA Transporter Identification Number: MMD147191613		
USDOT Motor Carrier Identification Number: 329425		
Intrastate Motor Carrier Identification Number:		
Telephone Number in case of accident or emergency: (313) 254-9524		
Michigan L1W Uniform Program Identification Number: UL1W0329425M1		
Certified by: <i>Jeanette M. Noebel</i>		
Registration Issued: 03/25/2016		Registration Expiration: 03/25/2017
Issuing Agency: Department of Environmental Quality		
Agency Telephone Number: (586)-753-3850 or (586)-753-3846		
BQP 5123 (08/17/11)		

Universal Waste Destination Facility – What is it?

- Facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities authorized at universal waste handlers
- Requires a hazardous waste license unless activities at the destination location (treatment, storage and/or recycling) are exempt from hazardous waste licensing (e.g. recycling of electric lamps)
- Universal Waste Destination Facilities
- Must be notified as a universal waste destination facility
- Required to at least keep a record of each universal waste shipment and additional requirements if a waste is rejected
- Specific requirements will depend on the type of universal waste received and operations being performed

Batteries

- Batteries that are not characteristically hazardous can be handled as solid waste
- Spent lead acid batteries have additional options
- Managed to prevent releases
- Closed containers need to be labeled Universal Waste Batteries, Waste Batteries, or Used Batteries
- Batteries
- Handler can perform some activities as long as casing of battery cell is not breached, including:

- Sort by type
- Mix types together
- Discharge
- Regenerate
- Disassemble packs
- Remove electrolyte

Batteries - Lead Acid

- Lead acid batteries not managed according to Part 111, Rule 804, need to be handled as hazardous waste or universal waste
- Part 111, Rule 804 covers lead acid batteries that will be reclaimed
- Persons managing lead acid batteries to be reclaimed need to characterize any waste they generate
- Need to comply with Land Disposal Restrictions (LDR) – keep copy of exemption in file (40 CFR 268.7(a)(7)) and one time notification
- Level of regulation under Rule 804 depends on type of storage/reclaim combo and who performs reclamation

Pesticides

- Closed containers need to be labeled Universal Waste Pesticides or Waste Pesticides and original label if possible
- Not just containers – tank, transport vehicle or vessel
- Comply with tank regs if in a tank
- Not applicable to empty pesticide containers – may need to triple rinse

Mercury Containing Equipment

- Thermostat
- Mercury switch
- Mercury thermometer
- Device containing elemental mercury
- Label Universal Waste – Mercury Containing Equipment, Waste Mercury – Containing Equipment, or Used Mercury – Containing Equipment
- Can substitute specific names
- Closed, sound, non-leaking containers

Lamps

- Lamp is defined as the bulb or tube portion of a lighting device specifically designed to produce radiant energy.
- Includes fluorescent, high intensity discharge, sodium vapor, mercury vapor, neon, and incandescent lamps
- Lamps cannot be intentionally crushed or broken
- Closed containers labeled Universal Waste Lamps, Waste Lamps, or Used Lamps
- Package in structurally sound container and manage to prevent breakage
- Incidental breakage ok IF in closed, non-leaking container and acceptable to universal waste destination facility
- Lamp crushing device requires AQD permit
- Lamp recyclers need to be aware of different requirements pertaining to their facility if they store or not before recycling (See Rule 206(5))

Lamps - Cathode Ray Tubes (CRTs)

- There is a special exclusion and exemption in Part 111 for CRTs – Rule 231 if not handled as universal waste
- Must be destined for recycling
- Stored in building with roof, floor, and walls or placed in closed container that minimizes release of CRT glass including fines to environment
- Labeled Do not mix with other glass materials and either Used cathode ray tubes – contains leaded glass or Leaded glass from televisions or computers

- Not speculatively accumulated
- Export requirements

Pharmaceuticals

- Closed packaging
- No specific label required - recommend Universal Waste Pharmaceuticals
- Manage to prevent releases
- May disassemble packaging and sort - requires specialized training to prevent incompatible mixing and worker exposure protections
- Liquids subject to Part 121
- EPA proposed federal rulemaking 9/15, expected to be final late 2016 or early 2017
- EPA proposed rules may require Michigan to abandon pharmaceuticals as a universal waste
- DEQ rulemaking process expected to take about 2 years following final federal rulemaking
- Pharmaceuticals

Consumer Electronics

- Any device containing an electric circuit board, liquid crystal display, or plasma display commonly found in homes and offices
- Managed to prevent breakage
- Labeled Universal Waste Consumer Electronics or Universal Waste Electronics
- Only universal waste not required to be closed
- Handler can repair for reuse
- Handler can remove other universal waste
- Handler can remove individual modular components for reuse

Antifreeze

- Ethylene or Propylene glycol used as heat transfer or dehydration fluid
- Label containers or tanks Universal Waste Antifreeze, Waste Antifreeze, or Used Antifreeze
- Keep containers closed
- Comply with Part 121
- Immediately clean up releases

How to Find Universal Waste Recyclers and Destination Facilities

- Search WDS at www.deq.state.mi.us/wdspi/
- Department of Agriculture Clean Sweep Program for Pesticides at www.michigan.gov/cleansweep
- Registered recyclers at www.michigan.gov/electronicwaste
- Google

Main Take Home Points

- Closed containers
- Labeled containers
- One year maximum accumulation
- Send to proper, notified destination facility

Notes: