

# “Ohio Specific” Universal Waste

- December 21, 2017
- Three new universal waste rules become effective specifically within the confines of the State of Ohio
  - Antifreeze
  - Non empty Aerosol Containers
  - Paint and Paint-Related Waste

# “Ohio Specific” Universal Waste

- Ohio EPA adopted these new universal wastes based on a petition from the Ohio Manufacturing Association for the Paint and Paint-Related Waste, and
- The Ohio Department of Transportation for both Antifreeze and Non-empty Aerosol Cans

# Universal Waste

- "Universal waste handler":
- (1) Means either of the following:
- (a) A "generator" (as defined in this rule) of universal waste.
- (b) The owner or operator of a facility, including all contiguous property, 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

- (2) Does not mean either of the following:
- (a) A person who treats [except under paragraph (A), (C), (E), (F), or (G) of rule 3745-273-13 of the Administrative Code, or paragraph (A), (C), (E), (F), or (G) of rule 3745-273-33 of the Administrative Code], disposes of, or recycles universal waste.
- (b) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

# Universal Waste Handler

- Small Quantity Handler of Universal Waste
  - *Less than 5,000 Kg*
- Large Quantity Handler of Universal Waste
  - *5,000 Kg or more*
  - *(Ex) liquid paint waste (222.5kg/dr) approximately 22 drums*
  - *T4 bulbs ( 15 kg/box) approximately 330 boxes*

# New Universal Waste

- "Destination facility" means a facility that **treats, disposes** of, or **recycles** a particular category of universal waste, except those management activities described in paragraphs (A), (C), (E), (F), and (G) of rule **3745-273-13** of the Administrative Code and in paragraphs (A), (C), (E), (F), and (G) of rule **3745-273-33** of the Administrative Code. A facility at which a particular category of universal waste is only accumulated is not a destination facility for purposes of managing that category of universal waste.

# Universal Waste Rules

## General - Advantages

- UWs do not count toward generator's monthly HW generation rate
- Generators can choose to follow UW rules
- Waste evaluation of UW is not required
- Recycling encouraged (but not required)
- No hazardous waste manifesting required

# Universal Waste Rules

## Common Components

- Container standards
- Accumulation time limit (except Aerosol cans)
- Training requirement (Basic UW training)
- Spill cleanup requirement
- Notification
- Tracking require for LQHUWs/destination fac.
- Transportation per DOT
- Each UW have specific management standards



# UW General Standards

- Notification requirement
  - LQHUU required to obtain a hazardous waste identification number if facility does not already have one
    - Site ID form 9029
    - LQHUU are not required to renotify if they already have an EPA ID #
    - Inspectors must note their status on the Verification Form
  - SQHUU not required to obtain an identification number

# UW General Standards

- Tracking of UWs
  - Applies to LQHUW and destination facilities
  - As applicable, incoming and outgoing shipments of universal waste
    - Type and quantity of waste
    - Date of shipment
    - Name of originating handler who sent UW or name of handler to which UW is sent

# UW General Standards

- Transporters of UW
  - Transport according to U.S. DOT standards
  - No hazardous waste manifest required
  - Store UW  $\leq$  10 days
  - Respond to release of UW
- Transporters and handlers must send UW to another handler or destination facility

# Ohio Specific UW General Standards

## Aerosol containers, antifreeze & paint/paint-related wastes

- Containers
  - Cabinets included for Aerosols, paints and bulbs.
- Tank Standards
  - Structurally sound, compatible w/ waste, non-leaking, labelled to identify contents,
  - Tanks requirements are applicable
  - Taken out of service if leaking
  - Inspection requirements

# Antifreeze



[This Photo](#) by Unknown Author is licensed under [CC BY-SA](#)

# Antifreeze

- “Antifreeze” means propylene glycol or ethylene glycol including aggregated batches of propylene glycol or ethylene glycol used as a heat transfer medium in an internal combustion engine; heating, ventilating, and air conditioning units; and electronics cooling applications; or used for winterizing equipment. [OAC 3745-273-09](#) (C)

# Antifreeze

- Both small and large quantity handler of universal waste shall manage universal waste antifreeze in a way that prevents releases of any universal waste or any component of a universal waste to the environment, as follows: [3745-273-13](#), [3745-273-33](#)
  - (1) shall store antifreeze in containers or tanks that are structurally sound and compatible with the antifreeze.
  - (2) A container or tank that does not comply shall be overpacked or taken out of service

# Antifreeze

- (3) Handlers shall keep the container closed except when adding or removing antifreeze
- (4) Handlers storing antifreeze in a tank needs to comply with paragraphs (B) to (H) of rule [3745-66-101](#)



# 66-101 regulates

- (B) Treatment in tanks
- (C) Inspections
- (D) Secondary containment
- (E) [Reserved]
- (F) Generator Closure
- (G) Ignitable and Reactive waste
- (H) Incompatible waste

# Antifreeze

- (5) Handlers shall not commingle or contaminate antifreeze subsequent to the removal of the antifreeze from a heat exchanger or other equipment when used to winterize that equipment
- (6) A handler of universal waste shall develop and maintain at the facility a procedure that describes how antifreeze will be prevented from being commingled or contaminated subsequent to removal (can't hide other HW in the antifreeze)
- (7) A handler shall use dedicated antifreeze collection and storage containers and tanks for the management of antifreeze.

# Antifreeze

- Antifreeze (subsequent to generation) that is mixed w/used oil is classified as a used oil & subject to the used oil rules
- This activity typically conducted by transporters

# Antifreeze reclamation

- A handler of universal waste may reclaim antifreeze provided
  - (a) The handler uses commercially available equipment, or equipment specifically custom designed or retrofitted to reclaim the antifreeze
  - (b) The handler uses reclamation equipment that has sufficient processing capacity to reclaim the quantity of antifreeze received or generated by the handler within one year

# Antifreeze reclamation

- (c) The handler shall train each operator of the reclamation equipment regarding the proper operation and maintenance of the reclamation equipment
- (d) The handler shall determine if the wastes generated from the reclamation of antifreeze are "hazardous wastes"

# Antifreeze Release

- Upon detection of a release of antifreeze
  - (a) Stop the release of antifreeze.
  - (b) Contain the released antifreeze.
  - (c) Clean up and properly manage and dispose the released antifreeze
  - (d) Remove leaking container or tank from service by transferring the contents to another container or tank
  - (e) Overpack or replace any leaking storage container
  - (f) Repair any leaking container or tank prior to returning the container or tank to service

# Antifreeze Release

- Spilled universal waste antifreeze that is recovered in liquid form or materials used to absorb a spill of universal waste antifreeze may be managed as universal waste antifreeze

# Antifreeze Training

- A handler of universal waste who manages antifreeze shall train employees who manage antifreeze regarding the universal waste requirements applicable to antifreeze, the proper management of antifreeze, the procedure to prevent contamination of antifreeze with characteristic hazardous waste or listed hazardous waste, and the proper response to a release of antifreeze.



# Antifreeze Labeling

- Each container or tank accumulating antifreeze shall be labeled with words that identify the contents of the container or tank (for example, used antifreeze, spent antifreeze, UW antifreeze, recyclable antifreeze). [3745-273-14](#)
- There is no specific wording

# Universal Wastes

Paint and Paint-related Ohio-Specific UWs



# Universal Wastes

## Paint and Paint-related Ohio-Specific UWs

- Paint
  - Mixture of pigmented or unpigmented powder coating
    - Dry powder fused into a continuous coating film through the use of heat
  - Pigmented or unpigmented mixture of binder and suitable liquid resulting from commercial, industrial, mining, agricultural and post consumer activities
    - Forms adhering surface coating

# Universal Wastes

## Paint and Paint-related Ohio-Specific UWs

- Paint-related wastes
  - A material contaminated with paint
  - Material derived from the reclamation of paint-related wastes that is recycled
  - Purge solvent, Rags, PPE, Paint scrapings

# Paint and Paint-related Ohio-Specific UW Management Standards

- Handler may puncture and crush paint containers
  - Does not exceed five gallons in volume
  - Use appropriately designed equipment to puncture or crush containers within an enclosed compartment or hopper
  - Has sufficient processing capacity to collect the contents of the containers
  - Train operator regarding proper operation and maintenance of equipment
- Collected paint can be classified as UW

# Paint and Paint-related Ohio-Specific UW Management Standards

- Recycling paint and paint-related waste
  - Paint can be reclaimed by any handler
  - Paint-related wastes can only be reclaimed on-site by the handler that generated the wastes or by a destination facility (i.e., permitted HW facility)

# Paint and Paint-related Ohio-Specific UW Management Standards

- Wastes generated from the reclamation of paint or paint-related wastes are not UWs
- Ensure that the employees responsible for recycling are trained regarding the proper operation and maintenance of the recycling process

# Aerosol containers



[This Photo](#) by Unknown Author is licensed under [CC BY-SA](#)



# Aerosol containers

## Aerosol containers

- Non-empty containers
- HW due to propellant or contents

# Aerosol containers

## Universal waste satellite accumulation area

- One bulk container  $\leq$  55 gallons or a cabinet area
- Container or cabinet needs labeled with words identifying contents
- Move aerosol containers to main UW storage area when bulk container/cabinet full
  - 1-year accumulation time clock begins and tracking is required

# Aerosol containers

A handler may puncture or crush aerosol containers

- Use appropriately designed equipment with sufficient processing capacity
- Collect contents of aerosol containers
- Equipment needs to be located in a ventilated area
- Protect equipment from an ignition source

# Aerosol containers

Train operators regarding proper operation and maintenance of equipment

- Do not mix incompatible wastes
- Ignitable or reactive waste requirements
- Containers that should not be punctured or crushed
- Manufacturer's maintenance specifications

# Aerosol containers

Determine if the contents removed from an aerosol container and the equipment filters are hazardous wastes

- Exception: collected contents consisting solely of paint can be UW
- If the contents are hazardous waste, OAC Chapter 3745-52 applies
- Empty containers can be recycled

# Ohio-Specific UWs

## Transporter



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-SA](#)

# Ohio-Specific UWs

## Transporters

- While in Ohio, the waste is a UW
- Upon entering another state, classify waste per the receiving state's rules
- If receiving state adopted 2015 Definition of Solid Waste rule:
  - waste will likely be classified as a HW in the receiving state; check w/ receiving state

# Questions

