



**Environmental
Protection Agency**

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

April 23, 2012

RE: RACK COATING SERVICE INC.
STARK COUNTY
OHD 986 979 896
NON-GENERATOR
NOV

John L. Hexamer
Chief Executive Officer
Rack Coating Service Inc.
5760 Erie Ave. NW
Canal Fulton, OH 44614

Dear Mr. Hexamer:

On April 11, 2012, I as a representative of the Ohio EPA Division of Materials and Waste Management conducted a compliance inspection of the Rack Coating Service Inc. (Rack Coating) facility located at 5760 Erie Ave. NW, Canal Fulton, for compliance with Ohio's hazardous waste and used oil regulations. You represented Rack Coating during the inspection

Rack Coating primarily conducts powder coating of fabricated metal parts that are shipped to it. Metals coated are primarily aluminum and carbon steel. Plastisol coating was a big part of the business at one time, but now is only a small part of the business. Prior to coating, parts are degreased with in an alkaline cleaner solution and water rinse process. Some parts are dipped in an iron phosphate solution. Some parts are media (sand) blasted prior to coating. Spent caustic greasing solution and iron phosphate solution are pH adjusted and then trucked to the Canal Fulton sewer system for treatment.

No hazardous waste was observed during the inspection; however I observed some materials that might be hazardous waste in the future. The facility uses several solvents (alcohols, acetone, toluene, and xylene) in small quantities on rags moistened with the solvent for wiping parts. Reportedly no free liquids are present on the used rags. Consequently these rags are not hazardous waste. However, if any of these should be used as a solvent and collected as a liquid, the spent solvent would be a hazardous waste and managed in accordance with the hazardous waste rules.

Similarly containers of materials that maybe unwanted, such as the approximately 8 drums of materials observed near a shipping dock, must be evaluated to determine if they are hazardous wastes before they are disposed. If a hazardous waste, they must be managed in accordance with the hazardous waste rules.

The facility is also a generator of used oil and used lamps.

The inspection included a review of the facility's operations, as well as waste management practices and documentation.

Based on observations made during the facility walk-through and inspection, Ohio EPA has determined that Rack Coating has violated the following state used oil regulations:

1. **OAC 3745-279-22(C)(1) Used oil containers must be labelled with the words “used oil”**

Outdoors behind the main building on soil near a concrete pad were about 6 one gallon containers and one 5-gallon container holding what was reported to be used oil. Some of the one gallon containers were tipped over lying on their side. Reportedly the used oil was from a recent change of oil from the air compressor that should have been recycled shortly after the oil change was complete. None of the containers were marked with the words “Used Oil”.

To return to compliance Rack Coating must::

- Label each container holding used oil with the words “Used Oil”; and
- Submit a photo of the containers marked with the words “Used Oil” to me within 14 days of receipt of this letter.

2. **OAC 3745-279-22(D) Generator must respond to used oil releases and perform cleanup steps.**

Ohio Administrative Code (OAC) Rule OAC 3745-279 22(D) requires a generator of used oil to respond to used oil releases and perform cleanup steps. Staining of the soil was observed near the one gallon containers and 5-gallon container discussed in Violation No. 1. The staining appeared to be used oil.

To return to compliance Rack Coating must::

- 1) Determine whether there are any other locations in addition to that noted above present at the facility on which used oil has been released.
- 2) Clean up and remove all released used oil and contaminated soils and debris identified by me as well as any additional releases identified by you.

Ohio EPA uses a visual standard when determining whether a clean-up of released used oil and any media that absorbed used oil is adequate. Ohio EPA does not require confirmatory soil sampling and analysis to demonstrate that the release has been cleaned up.

- 3) Soils and debris contaminated with used oil from the clean up may be managed as a solid waste by placing into your dumpster for transport to a landfill.

- 4) Submit documentation, on how removed, stained soil was managed and pictures of the areas from which used oil releases have been removed, to me within 14 days of receipt of this letter.

Submit the above requested response documentation to this office within 14 days of receipt of this letter. Response correspondence sent by the U. S. Postal Service should be sent to:

Neil Wasilk
Northeast District Office
Ohio Environmental Protection Agency
2110 East Aurora Road
Twinsburg, OH 44087

NECESSARY MEASURES

Rack Coating needs to immediately take the necessary measures to return to compliance with Ohio's environmental laws. Within 14 days of receipt of this letter, Rack Coating is requested to provide documentation to this office including the steps taken to abate the violations cited above. Documentation of steps taken to return to compliance includes written correspondence, updated policies, and photographs, as appropriate, and may be submitted via the postal service or electronically to neil.wasilk@epa.ohio.gov.

Please be advised that violations cited above will continue until the violations have been properly abated. Failure to comply with Chapter 3734 of the Ohio Revised Code and rules promulgated thereunder may result in a civil penalty of up to \$10,000 per day for each violation. It is imperative that you return to compliance. If circumstances delay the abatement of violations, Rack Coating is requested to submit written correspondence of the steps that will be taken by date certain to attain compliance.

CONCERNS

Rack Coating operates a media blasting (aka sand blasting) room. Reportedly most of the materials to be blasted are new metal parts from which oxides and corrosion must be removed prior to powder coating. However, some of the items blasted are old metals items, such as old painted cast iron furniture. (Rack Coating's website promotes Wrought Iron Refinishing as one of the services it offers.) Reportedly media blasting of old previously painted items is currently a very small part of the blasting. Rack Coating should be aware that paint on old metal items may contain lead and/or other heavy metals. If old, previously painted items should constitute more than a very small amount of the blasting work done, the spent blasting media must be tested using the TCLP Test to determine if it is a hazardous waste.

RACK COATING SERVICE INC.

APRIL 23, 2012

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You reported that spent sand blast media currently goes to a concrete company for recycling. Rack Coating should be aware that if any of the recycled spent blasting media were to be a hazardous waste and it were to be recycled in a concrete product that was placed on or below the ground, this would constitute illegal disposal of a hazardous waste, which is a very serious violation of the hazardous waste rules.

Enclosed you will find a copy of the checklists completed during the April 11, 2012 inspection. Also enclosed for your information are guidance documents on several topics that we discussed during the inspection.

OTHER INFORMATION

The Division of Materials and Waste Management has created an electronic news service to provide you with updates related to hazardous waste activities in Ohio. You can find more information and sign up for this free service at the following Web link: http://ohioepa.custhelp.com/cgi-bin/ohioepa.cfg/php/enduser/doc_serve.php?2=subscriptionpage.

Should you have any questions regarding this letter, please contact me at (330) 963-1165.

Sincerely,



Neil J. Wasilk
Environmental Specialist
Division of Materials and Waste Management

Enclosure

NJW:ddw

cc: Marlene Kinney, Ohio EPA, DMWM, NEDO
ec: Natalie Oryshkewych, Ohio EPA, DMWM, NEDO
Nyall McKenna, Ohio EPA, DMWM, NEDO
Jeff Mayhugh, Ohio EPA, DMWM, CO

Send to Central Office <input checked="" type="checkbox"/>	Ohio Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION/VERIFICATION FORM	For Ohio EPA use only
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Completed verification forms required to be submitted to CO should be e-mailed to brad.hauser@epa.state.oh.us.

Site EPA ID No.	EPA ID Number: OHD986979896	
Site Name	Name: Rack Coating Service Inc	Website: (Optional)
Site Location Information	Street Address: 5760 Erie Ave. NW	
	City, Town, or Village: Canal Fulton	State: OH
	County Name: STARK	
Site Land Type (check only one)	Private <input checked="" type="checkbox"/>	County <input type="checkbox"/>
NAICS code(s) www.census.gov/epcd/www/naics.html	District <input type="checkbox"/>	Federal <input type="checkbox"/>
	Indian <input type="checkbox"/>	Municipal <input type="checkbox"/>
	State <input type="checkbox"/>	Other <input type="checkbox"/>
	Zip Code: 44614	

Facility Representative	First Name: John	MI:	Last Name: Hexamer
Additional names can be recorded in number 12	Title: Chief Executive Officer		
	Phone Number: 330-854-2869	Phone Number Extension:	
Only provide address information if it is different than the site address	E-Mail Address:		
	Fax Number:	Fax Number Extension:	
	Street or P.O. Box:		
	City, Town or Village:		
	State:	Zip Code:	

Legal Owner And Operator of the Site. List Additional Owners and/or Operators in the Comment Section or on another copy of this form page	Name of Site's Legal Owner: Lindsay Concrete		Date Became Owner (mm/dd/yyyy):	
	Owner Type: <input checked="" type="checkbox"/>	Private <input type="checkbox"/>	County <input type="checkbox"/>	District <input type="checkbox"/>
	Federal <input type="checkbox"/>	Indian <input type="checkbox"/>	Municipal <input type="checkbox"/>	State <input type="checkbox"/>
	Other <input type="checkbox"/>	Street or P.O. Box:		
	City, Town or Village:		Owner Phone #:	
	State:	Country:	Zip Code:	
	Name of Site's Operator:		Date Became Operator (mm/dd/yyyy):	
	Operator Type: <input type="checkbox"/>	Private <input type="checkbox"/>	County <input type="checkbox"/>	District <input type="checkbox"/>
	Federal <input type="checkbox"/>	Indian <input type="checkbox"/>	Municipal <input type="checkbox"/>	State <input type="checkbox"/>
	Other <input type="checkbox"/>	Street or P.O. Box:		
	City, Town or Village:		Operator Phone #:	
	State:	Country	Zip Code:	

VIOLATIONS CITED?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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TYPE OF HANDLER - MARK "X" AS APPROPRIATE	
<input checked="" type="checkbox"/> Not a HW Generator	<input type="checkbox"/> UNKNOWN: Cited for violation of 3745-52-11 <input type="checkbox"/> Short-Term/Temporary Generator (generates from a short-term or one-time event and not from on-going processes). <i>Check the box for the applicable generator status and provide a comment.</i>
	<input type="checkbox"/> Large Quantity Generator (LQG) <input type="checkbox"/> Small Quantity Generator (SQG) <input type="checkbox"/> Conditionally Exempt Small Quantity Generator <input type="checkbox"/> U.S. Importer of Hazardous Waste <input type="checkbox"/> Mixed Waste (Hazardous and Radioactive) Generator

TYPE OF REGULATED WASTE ACTIVITY (MARK "X" IN ALL OF THE APPROPRIATE BOXES)

- | | |
|---|--|
| <input type="checkbox"/> Hazardous Waste Transporter | <input type="checkbox"/> Exempt Boiler and/or Industrial Furnace |
| <input type="checkbox"/> Hazardous Waste Transfer Facility | <input type="checkbox"/> Small Quantity On-Site Burner Exemption |
| <input type="checkbox"/> Treater, Storer or Disposer of Hazardous Waste | <input type="checkbox"/> Smelting, Melting, Refining Furnace Exemption |
| <input type="checkbox"/> Recycler of Hazardous Waste | <input type="checkbox"/> Underground Injection Control Facility |
| <input type="checkbox"/> 72-Hour Recycler | <input type="checkbox"/> Receives Hazardous Waste from Off-site |

UNIVERSAL WASTE ACTIVITIES (INDICATE TYPES OF UNIVERSAL WASTE MANAGED

(CHECK ALL BOXES THAT APPLY)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Small Quantity Handler of Universal Waste | <input type="checkbox"/> Destination Facility for Universal Waste |
| <input type="checkbox"/> Large Quantity Handler of Universal Waste
(accumulates 5,000 kg. or more) | |

CHECK ALL BOXES BELOW THAT APPLY FOR THE TYPES OF UNIVERSAL WASTE THE FACILITY MANAGES

- Batteries
 Pesticides
 Mercury containing equipment
 Lamps

USED OIL ACTIVITIES (INDICATE TYPE(S) OF ACTIVITY(S))

- Used Oil Generator
 Used Oil Transporter
 Used Oil Transfer Facility
 Used Oil Processor
 Used Oil Re-refiner
 Off-Specification Used Oil Burner
 Used Oil Fuel Marketer who directs shipment of Off-Spec Used Oil
 Used Oil Fuel Marketer who first claims the Used Oil meets the specifications

Eligible Academic Entities with Laboratories: Facility has previously notified that they are opting into managing laboratory hazardous waste pursuant to OAC rules 3745-52-200 through 3745-52-216. Check the box(es) below to indicate the laboratory type.

- College or University
 Teaching hospital that is owned by or has a formal written affiliation agreement with a college or university
 Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university

Waste Codes for Federally Regulated Hazardous Wastes. Please list the codes for the federally regulated hazardous waste handled at the site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page or list them in the comments if more space is needed. If the waste codes are the same as listed in the most recent RCRAInfo source record, you do not need to list them. Instead just indicate the date of the most recent source record.

COMMENTS: USE THIS AREA TO DESCRIBE WHETHER THE INSPECTION WAS ANNOUNCED, WHETHER THE WASTE IS STORED IN TANKS OR CONTAINERS, ETC.

Announced Yes No Additional Facility Representatives:
 Tanks Yes No
 Containers Yes No

Name of Inspector(s)

Name of Inspector(s)

Date of Inspection/Time
(mm/dd/yyyy) (hh:mm)

N. Wasilk

4/11/2012 1:00 p.m.

Comments:

Hazardous Waste Process Flow

Facility:

OHD 986 979 896

Rack Coating Service Inc.
5760 Erie Ave. NW
Canal Fulton, OH 44614

Rack Coating primarily conducts powder coating of fabricated metal parts that are shipped to it. Metals coated are primarily aluminum and carbon steel. Plastisol coating was a big part of the business at one time, but now is only a small part of the business.

Prior to coating, parts are degreased with in an immersion system that uses an alkaline cleaner solution and water rinse process. An oven is used after degreasing to dry the parts. No organic solvents used in the degreaser. Some parts are dipped in iron phosphate solution prior to coating. Spent alkaline cleaner solution and spent iron phosphate solution are trucked to the Canal Fulton sewer system. Any “messed-up” coating jobs are sent off-site to be “stripped” so as to remove powder coating so that parts can be recoated.

A media blasting (aka sand blasting) room is used to clean materials prior to coating. Most of the materials to be blasted are new metal parts to remove oxides and corrosion prior to powder coating. Usually these are pieces that must pass an extreme corrosion test. However, some of the items to be blasted are old metals items, such as old bed frames, cast iron furniture, etc. [Facility website promotes Wrought Iron Refinishing as one of the services it offers.) Spent sand blast media goes to a concrete company. A fan and dust collection system for the media blasting booth is located outside behind the building. Drums for holding collected dust are attached to the system.

No heavy metals are in powder coatings used.

Powder coating is applied by spraying and then the coating is cured by holding the coated parts in a curing oven. Plastisol is applied by dipping, and then cured in an oven.

Used oil is generated from small oil sources such as lawn mower and air compressor oil changes. Outdoors behind the main building on soil near a concrete pad were about 6 one gallon containers and one 5-gallon container holding what was reported to be used oil from an compressor oil change. Some of the one gallon containers were tipped over lying on their side. Staining on ground near containers appeared to be used oil.

A lighting project which installed new fixtures to use T-8 fluorescent lamps Project was recently done with a grant from Ohio Edison. The electrical contractor took all old lamps.

RACK COATING SERVICES

USED OIL INSPECTION CHECKLIST GENERATORS, COLLECTION CENTERS AND AGGREGATION POINTS

NOTE: A facility is subject to the federal SPCC regulations (40 CFR 112) if it is non-transportation related (e.g., fixed) and has an aggregate above ground storage capacity greater than 1,320 gallons or a total underground storage capacity greater than 42,000 gallons of oil (including used oil), and there is reasonable expectation of a discharge to navigable waters.

PROHIBITIONS

1.	Does the generator manage used oil in a surface impoundment or waste pile? If yes:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
	a. Is the surface impoundment or waste pile regulated as a hazardous waste management unit? [3745-279-12(A)]	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

NOTE: For example, used oil contaminated scrap metal stored in a pile.

2.	Is used oil used as a dust suppressant? [3745-279-12(B)]	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
3.	Is off-specification used oil fuel burned for energy recovery in devices specified in 3745-279-12(C)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

NOTE: Multiple used oil checklists may be applicable if used oil handler is performing multiple tasks (e.g., if generating used oil and shipping directly to a burner, complete generator and marketer checklists at a minimum).

GENERATOR STANDARDS

4.	Does the generator mix hazardous waste with used oil? If so,	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
	a. Is the mixture managed as specified in 3745-279-10(B)? [3745-279-21(A)]	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

NOTE: Used Oil mixed with listed (3745-51-30 to 3745-51-35) or characteristic (3745-51-20 to 3745-51-24) hazardous waste are subject to regulation as a hazardous waste, unless the listed hazardous waste is listed solely because it exhibits a hazardous characteristic, and the resultant mixtures do not exhibit a characteristic. Mixtures of used oil and CESQG hazardous waste are subject to OAC Chapter 3745-279.

5.	Does the generator of a used oil containing greater than 1,000 ppm total halogens manage the used oil as a hazardous waste unless the presumption is rebutted successfully? [3745-279-21(B)]	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
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NOTE: If used oil contains greater than 1000 ppm total halogens, it is presumed to be listed hazardous waste until the presumption is successfully rebutted.

6.	Does the generator store used oil in tanks; or containers; or a unit(s) subject to regulation as a hazardous waste management unit? [3745-279-22(A)]	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
7.	Are containers and aboveground tanks used to store used oil in good condition with no visible leaks? [3745-279-22(B)]	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.	Are containers, above ground tanks, and fill pipes used for underground tanks clearly labeled or marked "Used Oil?" [3745-279-22(C)]	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
9.	Has the generator, upon detection of a release of used oil, done the following: [3745-279-22(D)]	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
	a. Stopped the release?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
	b. Contained the release?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
	c. Cleaned up and properly managed the used oil and other materials?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
	d. Repaired or replaced the containers or tanks prior to returning them to service, if necessary?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>

ON-SITE BURNING IN SPACE HEATER

10.	Does the generator burn used oil in used-oil fired space heaters? [3745-279-23] If so:	<i>NO</i>		
	a. Does the heater burn only used oil that owner/operator generates or used oil received from household do-it-yourself (DIY) used oil generators?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

[Facility Name/Inspection Date]

[ID Number]

Used Oil Checklist for Generators/June 2008

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b.	Is the heater designed to have a maximum capacity of not more than 0.5 million BTU per hour?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
c.	Are the combustion gases from heater vented to the ambient air?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

NOTE: Ash accumulated in a space heater must be managed in accordance with 3745-279-10(E).

GENERATOR TRANSPORTATION

11.	Does the generator have the used oil hauled only by transporters that have obtained a U.S. EPA ID#? <i>SELF TRANSPORTING</i>	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
12.	If the generator self-transport used oil to an approved collection site or to an aggregation point owned by the generator: [3745-279-24]	
a.	Does the generator transport used oil in a vehicle owned by the generator or an employee of the generator?[3745-279-24]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
b.	Does the generator transport more than 55 gallons of used oil at any time?[3745-279-24]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>

NOTE: Used oil generators may arrange for used oil to be transported by a transporter without a U.S. EPA ID # if the used oil is reclaimed under a contractual agreement (i.e., tolling arrangement).

COLLECTION CENTERS AND AGGREGATION POINTS

13.	Is the DIY used oil collection center in compliance with the generator standards in 3745-279-20 to 3745-279-24? [3745-279-30]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
14.	Is the non-DIY used oil collection center registered with Ohio EPA? [3745-279-31]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
15.	Is the used oil aggregation point in compliance with the generator standards in 3745-279-20 to 3745-279-24? [3745-279-32]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

NOTE: Complete Used Oil Generator and any other applicable used oil handler checklist (e.g., marketer, burner, etc.) for used oil collection centers and aggregation points.

RACK COATING SERVICES

SMALL QUANTITY UNIVERSAL WASTE HANDLER REQUIREMENTS – BATTERIES AND LAMPS		
<i>Large Quantity Universal Waste Handler (LQUWH) = 5,000 Kg or more</i>		
<i>Small Quantity Universal Waste Handler (SQUWH) = 5,000 Kg or less</i>		
PROHIBITIONS		
1.	Did the SQUWH dispose of universal waste? [3745-273-11(A)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
2.	Did the SQUWH dilute or treat universal waste, except when responding to releases as provided in OAC rule 3745-273-17 or managing specific wastes as provided in OAC rule 3745-273-13? [3745-273-11(B)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
WASTE MANAGEMENT AND LABELING/MARKING – NO U.W. WASTE ON-SITE AT		
UNIVERSAL WASTE BATTERIES TIME OF INSPECTION		
3.	Are batteries that show evidence of leakage, spillage or damage that could cause leaks contained? [3745-273-13(A)(1)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
4.	If batteries are contained, are the containers closed and structurally sound, compatible with the contents of the battery and lack evidence of leakage, spillage or damage that could cause leakage? [3745-273-13(A)(1)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
5.	Are the casings of the batteries breached, not intact, or open (except to remove the electrolyte)? [3745-273-13(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
6.	If the electrolyte is removed or other wastes generated, has it been determined whether the electrolyte or other wastes exhibit a characteristic of hazardous waste? [3745-273-13(A)(3)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	a. If the electrolyte or other waste is characteristic, is it managed in compliance with OAC Chapters 3745-50 through 3745-69? [3745-273-13(A)(3)(a)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	b. If the electrolyte or other waste is not hazardous, is it managed in compliance with applicable law? [3745-273-13(A)(3)(b)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
7.	Are the batteries or containers of batteries labeled with the words "Universal Waste - Batteries" or "Waste Battery(ies)" or "Used Battery(ies)"? [3745-273-14(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
UNIVERSAL WASTE LAMPS NONE ON-SITE		
8.	Does the SQUWH contain lamps in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with contents of the lamps? Are containers or packages closed and do they lack evidence of leakage, spillage or damage that could cause leakage? [3745-273-13(D)(1)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
9.	Are lamps that show evidence of breakage, leakage or damage that could cause a release of mercury or hazardous constituents into the environment immediately cleaned up? Are they placed into a container that is closed, structurally sound, compatible with the contents of the lamps, and lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or hazardous waste constituents to the environment? [3745-273-13(D)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
<p>NOTE: Treatment (such as crushing) by a UWH is prohibited under this rule unless the facility is permitted for such activities [3745-273-31(B)]. A generator crushing lamps must manage lamps according to hazardous waste rules (OAC Chapter 3745-52). Lamp crushing is a form of generator treatment (OAC rule 3745-52-34). Crushed lamps must be transported by a registered hazardous waste transporter to a permitted hazardous waste facility using a hazardous waste manifest.</p>		
10.	Are the lamps or containers or packages of lamps labeled with the words "Universal Waste - Lamp(s)" or "Waste Lamp(s)" or "Used Lamp(s)"? [3745-273-14(E)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

ACCUMULATION TIME		
11.	Is the waste accumulated for less than one year? [3745-273-15(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	a. If not, is the waste accumulated over one year in order to facilitate proper recovery, treatment or disposal? (Burden of proof is on the handler to demonstrate) [3745-273-15(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
<i>NOTE: Accumulation is defined as date generated or date received from another handler.</i>		
12.	Is the handler able to demonstrate the length of time the universal waste has been accumulated? [3745-273-15(C)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	If yes, describe below: <i>FACILITY HAD RECENTLY COMPLETED A PROJECT TO INSTALL NEW FIXTURES AND REPORTED THAT CONTRACTOR HAD TAKEN ALL OLD LAMPS. ALSO REPORTED LAMPS ARE TAKEN TO STARIC CO. RECYCLING</i>	
EMPLOYEE TRAINING <i>EVENTS</i>		
13.	Are employees who handle or have the responsibility for managing universal waste informed of waste handling/emergency procedures, relative to their responsibilities? [3745-273-16]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
RESPONSE TO RELEASES		
14.	Are releases of universal waste and other residues immediately contained? [3745-273-17(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
15.	Is the material released characterized? [3745-273-17(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
16.	If the material released is a hazardous waste, was it managed as required in OAC Chapters 3745-50 through 3745-69? (If the waste is hazardous, the handler is considered the generator of the waste and is subject to OAC Chapter 3745-52) [3745-273-17(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
OFF-SITE SHIPMENTS		
<i>NOTE: If a SQUWH self-transport waste, then the handler must comply with the Universal Waste transporter requirements.</i>		
17.	Are universal wastes sent to either another handler, destination facility or foreign destination? [3745-273-18(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
18.	Is the handler aware of DOT requirements for packaging and shipping? If no, make aware of 49 CFR 171-180.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
19.	Prior to shipping universal waste off-site, does the originating handler ensure that the receiver agrees to receive the shipment? [3745-273-18(D)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
20.	Has the originating handler ever had an off-site shipment rejected by another handler or destination facility?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	a. If yes, did the originating handler receive the waste back or agree to where the shipment was sent? [3745-273-18(E)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
21.	If a handler rejects a partial or full load from another handler, does the receiving handler contact the originating handler and discuss and do <u>one of the following</u> :	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	a. Send the waste back to the originating handler or send the shipment to a destination facility (If both the originating and receiving handler agree)? [3745-273-18(F)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
22.	If the handler received a shipment of hazardous waste that was not a universal waste, did the SQUWH immediately notify Ohio EPA? [3745-273-18(G)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
EXPORTS		
23.	Is waste being sent to a foreign destination? If so:	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

a.	Does the small quantity handler comply with primary exporter requirements in OAC rules 3745-52-53, 3745-52-56, and 3745-52-57? [3745-273-20(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
b.	Is waste exported only upon consent of the receiving country and in conformance with the U.S. EPA "Acknowledgment of Consent" as defined in OAC rules 3745-52-50 to 3745-52-57? [3745-273-20(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
c.	Is a copy of the U.S. EPA "Acknowledgment of Consent" provided to the transporter? [3745-273-20(C)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

Universal Waste Rules for Handlers of Lamps

DHWM Guidance Document

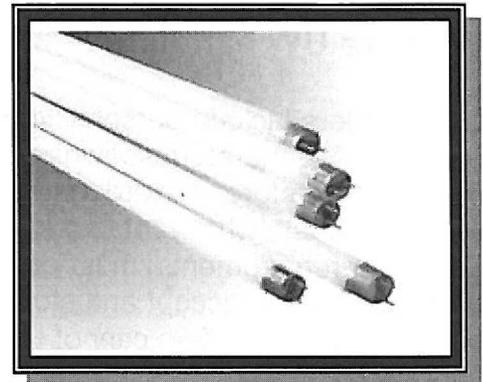
Date: June 2005

Purpose:

This guidance document is intended to provide handlers with an overview of the universal waste rules (UWR) as they pertain to hazardous waste lamps. Ohio's UWR are found in Ohio Administrative Code (OAC) Chapter 3745-273. This document is not intended to be a substitute for reading the universal waste rules.

Introduction:

Ohio EPA's use of the term "lamp" [see OAC rule 3745-50-10(A)] applies generically to hazardous waste lamps including: incandescent, fluorescent, metal halide, neon, high-intensity discharge, high-pressure sodium and mercury-vapor lamps. Fluorescent lamps may contain up to 40 milligrams (mg) of elemental mercury, depending on the brand and manufacturer date. Lamps may also contain lead and cadmium. Because most lamps exhibit the characteristic of toxicity for heavy metals when disposed, they could be a hazardous waste.



A waste must be a hazardous waste before it is defined as a universal waste. If a hazardous waste stream is not managed under the universal waste rules, then it must be managed as a hazardous waste under the applicable regulations if the waste exhibits any hazardous waste characteristic. Non-hazardous lamps also can be managed as universal wastes, although the universal waste compliance standards are not required.

Background:

Lamps have been added to Ohio's list of universal wastes (UW). The list of UW includes certain suspended and recalled pesticides, mercury-containing thermostats, and discarded batteries. When lamps were added to the list of universal wastes, Ohio revised the classification of hazardous lamps in the hazardous waste program.

Universal Waste Rules for Handlers of Lamps

Previously, **used** lamps that were being recycled were considered characteristic byproducts. This removed them from regulation as wastes and therefore hazardous wastes. Used lamps that were being discarded were to be evaluated to determine whether they were hazardous. Now hazardous lamps are considered “spent materials” and remain hazardous waste even when recycled, unless they are managed as universal wastes (see OAC rule [3745-51-02](#)). Hazardous waste lamp generators have the option of handling their lamps as hazardous waste or as UW. Managing hazardous waste lamps under the UWR eases certain regulations imposed on generators of spent lamps.



Non-hazardous Lamps: Ohio EPA recommends recycling lamps that do not exhibit hazardous waste characteristics. While these lamps are not hazardous waste, Ohio EPA encourages recycling rather than disposal. Non-hazardous lamps still contain low amounts of heavy metals such as mercury that could potentially harm the environment.

Who are UW handlers?

UW handlers include persons who generate, receive and store, but do not treat, dispose of or recycle UW generated elsewhere. Ohio's hazardous waste rules state that a person who receives and stores hazardous waste is required to have a storage permit. Generators of universal waste who want to take advantage of the UWR instead of the hazardous waste generator requirements, must comply with all UW handler requirements. The UWR allows these persons to accept and store UW from off-site without having to obtain a storage permit. However, UW handlers cannot treat, dispose of or recycle UW.

What are the UW handler categories?

UW handlers are classified into two categories based on the quantity of UW waste they accumulate at any time:

- small quantity handlers [accumulate less than 5,000 kilograms (11,023 pounds) of UW (not by type) at any time], or
- large quantity handlers [accumulate more than 5,000 kilograms (11,023 pounds) of UW (not by type) at any time].

If a small quantity UW handler accumulates more than 5,000 kilograms of UW on-site at any time, they must comply with the large quantity UW handler requirements for the remainder of the calendar year. All generators have the option of handling their UW under the UWR or under Ohio's hazardous waste generator requirements found in OAC Chapter [3745-52](#).

Universal Waste Rules for Handlers of Lamps

Note: UW should not be counted when making quantity determinations for hazardous waste generator categories (i.e., conditionally exempt small quantity generators (CESQGs), small quantity generators (SQGs) and large quantity generators (LQGs)). Universal waste handlers' status levels should not be confused with hazardous waste generator status levels.

May I use a lamp crusher to crush the lamps I generate?

The UWR prohibits handlers from crushing lamps. If you are the lamp generator and you want to continue crushing them, you have the option of managing those lamps under the hazardous waste generator requirements in OAC Chapter [3745-52](#). You cannot send crushed hazardous lamps to an unpermitted handler. They must be transported by a registered hazardous waste transporter to a permitted hazardous waste facility accompanied by a hazardous waste manifest. While some commercially available lamp crushers are designed to control mercury emissions when properly maintained, please beware that due to the unique properties of mercury, there is a high potential for exposure to harmful mercury vapors when lamps are crushed.

What are the packaging requirements for UW lamps?

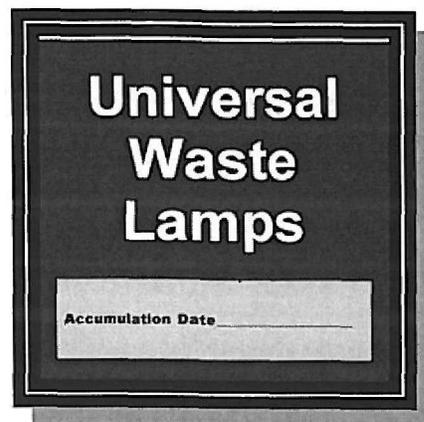
Lamps must be packaged to minimize breakage and must be designed to contain potential releases due to breakage. Some examples of acceptable packaging include double- or triple-ply cardboard containers with closed lids or packaging in which new lamps are shipped from the manufacturer. Broken, damaged or leaking lamps can be sent to permitted recycling facilities. Acceptable storage for broken lamps includes a closed 55-gallon steel drum or a closed wax fiberboard drum.

Warning: Because of its unique properties, mercury from broken or crushed lamps can become airborne at room temperature and can seep into cracks and porous materials such as cloth, carpet or wood, slowly emitting vapors over a long period. Immediate and proper containment of a mercury release is very important. For information on mercury containment and clean up, contact your local fire department or call Ohio EPA's spill hotline at (800) 282-9378.

What are the labeling requirements for UW lamps?

Universal waste lamps or their containers must be clearly marked "Universal Waste Lamp(s)," "Waste Lamp(s)" or "Used Lamp(s)." The containers should never be labeled "Hazardous Waste" unless being managed as such.

UW handlers must be able to demonstrate the accumulation time for all universal wastes. Accumulation begins with the date the lamps became a waste or were received. The handler may make this determination by:



- placing the lamps in a container and marking or labeling the container with the earliest date that any UW in the container became a waste or was received;
- marking or labeling the individual item of UW (i.e., each lamp) with the date it became a waste or was received;
- maintaining an inventory system on-site that identifies the date the lamp(s) being accumulated became a waste or was received;
- maintaining an inventory system on-site that identifies the earliest date that any UW in a group of UW items or a group of containers of UW became a waste or was received;
- placing the UW in a specific accumulation area and identifying the earliest date that any UW in the area became a waste or was received; or
- any other method which clearly demonstrates the length of time that the UW has been accumulated from the date it became a waste or was received.

Am I required to notify Ohio EPA of my UW activities?

Small quantity UW handlers and transporters are not required to notify Ohio EPA of their activities and are not required to obtain an EPA hazardous waste ID number. Large quantity UW handlers must notify Ohio EPA in writing and must obtain an EPA hazardous waste ID number prior to exceeding the 5,000 kg storage limit. Large quantity UW handlers that have previously notified Ohio EPA of their hazardous waste activities and who have received an EPA identification number are not required to renotify. For specifics on the notification requirements, see OAC rule 3745-273-32.

How long may I accumulate UW lamps?

If you are a UW handler, you may accumulate UW fluorescent lamps on-site for up to one year regardless of your status. If greater than a year accumulation is required, you must be able to prove that the accumulation is necessary in order to facilitate proper recovery, treatment or disposal.

Who can I send or take my UW lamps to?

As a universal waste handler, you can send or take lamps only to another UW handler or to a permitted (if in Ohio) destination facility. If you are sending your UW lamps to a facility outside Ohio, the out-of-state destination facility must be authorized by that state to accept lamps.

Am I required to manifest my UW lamps?

No. UW handlers are not required to manifest their off-site shipments. However, all UW handlers must ensure delivery of their universal waste to another UW handler or to a permitted destination facility as defined in OAC rule 3745-273-09(B).

Do I need to use a special transporter like I do for my other hazardous waste?

No. UW handlers are not required to use a certain transporter. Universal waste transporters, however, must comply with DOT packaging/labeling requirements, transfer facility storage requirements and must immediately contain all releases of universal waste in the event of a spill.

May I transport my own universal waste lamps?

Yes. Both small and large quantity universal waste handlers can transport their universal waste lamps to either another universal waste handler or to a universal waste destination facility if they comply with the universal waste transporter requirements in OAC rules 3745-273-50 through 3745-273-56.

What are my record-keeping requirements?

If you are a small quantity UW handler, you are not required to keep off-site shipment records of UW. If you are a large quantity UW handler, you are required to retain shipment records received on-site and shipments sent off-site for at least three years. For specifics, see OAC rule 3745-273-39.

For more information on Ohio's UWR, please see our guidance document entitled, "Universal Waste Rule" and our universal waste handler requirements summary table available on our Web page. If you have questions regarding information contained in this guidance document, please contact Ohio EPA's Division of Hazardous Waste Management's Regulatory Services Unit at 614-644-2917 or visit our Web site.

Fluorescent Lamps: What You Should Know

DHWM Guidance Document

DATE: January 2007

Do you use lamps?

EVERYONE uses lamps! Many people don't realize they can be hazardous because of the mercury, lead and cadmium they contain. When Ohio EPA uses the term "lamp" it includes:

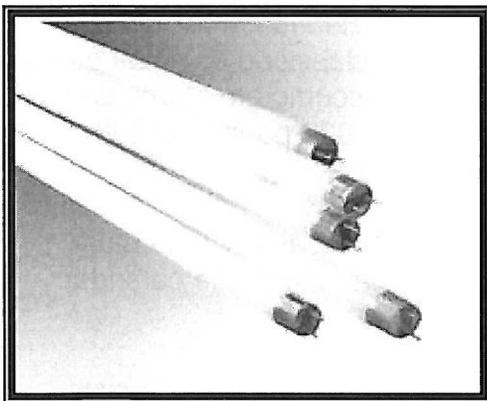
- incandescent;
- fluorescent;
- metal halide;
- neon;
- high-intensity discharge (HID);
- high-pressure sodium;
- mercury-vapor;
- and LED lamps.

Why are waste lamps harmful?

Lamps can contain mercury, lead, cadmium and barium, which are toxic chemicals that can accumulate in living tissue and cause health problems. A small amount of mercury is needed in all fluorescent and HID lamps to make the lamp work. When a lamp breaks or is thrown away in a solid waste landfill or incinerator, the mercury can contaminate air, soil, surface water and ground water.

Be Aware!

Some fluorescent lamps contain up to 40 mg of mercury!



Are fluorescent lamps a good environmental and economic choice?

Yes. The use of energy-efficient lighting reduces electricity needed from power plants. This reduces harmful power plant emissions of mercury, carbon dioxide and nitrogen oxide. Using less energy reduces demands on electric utilities and results in cost savings for customers.

What is the best way to manage the hazardous lamps I generate?

We recommend that you manage your waste lamps under the Universal Waste Rule (UWR). The UWR eliminates many regulatory requirements such as waste evaluation, manifesting and record keeping. This rule ensures waste lamps will be properly recycled. By following the UWR, you will reduce the financial and regulatory burden on your company and help protect the environment.

What is the UWR?

The UWR streamlines collection requirements for certain hazardous wastes in the following categories: batteries, pesticides, mercury-containing equipment (such as thermostats) and lamps (such as fluorescent bulbs). The rule is designed to make it easier for universal waste (UW) handlers to collect these items and send them for recycling or proper disposal.

Advantages of managing waste lamps under the UWR:

- UW is not counted toward hazardous waste generator status.
- No manifesting required unless the waste lamps are transported through states, or treated or disposed in states that do not recognize mercury-containing lamps as a universal waste.
- Increased storage time available.
- Reduced administrative requirements for record-keeping, training, and emergency preparedness.

Managing your lamps as UW

If you choose to manage your waste lamps as UW, you are not required to evaluate them. You are, however, required to determine your handler category and then follow all requirements associated with that category. Most UW handlers are classified as small quantity handlers based on the total quantity of **all types** of UW waste they accumulate at any time. Small quantity handlers accumulate less than 5,000 kilograms, or 11,023 pounds of UW at any time. For example, 5,000 kg is approximately 17,000 four-foot lamps.

UW handlers who accumulate more than 5,000 kilograms of UW on-site at any time must comply with the large quantity UW handler requirements for the remainder of the calendar year.

The main advantages to managing waste under the UWR instead of the hazardous waste rules are that, the UWR requires less paperwork, less man-hours and saves you money.

May I use a lamp crusher to crush the lamps I generate?

Yes. However, if you choose to crush your lamps, you must manage them under the hazardous waste rules. You may not manage crushed lamps under the UWR.

What if I decide not to manage my lamps as UW?

If you choose not to manage your lamps as UW, then you must evaluate them to determine if they are hazardous. To evaluate your waste lamps, you can either:

- send a representative sample to a laboratory for testing; or
- obtain complete up-to-date analysis of the lamps from the manufacturer.

Managing your lamps as hazardous waste

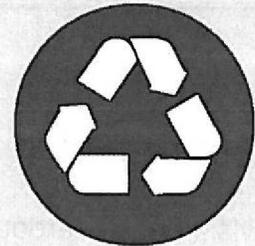
If your lamps are hazardous, you must manage them according to Ohio's hazardous waste rules. To know what rules to follow, you must know your generator category. Generator category is determined by how much hazardous waste you generate in a calendar month. For more details, please see our Hazardous Waste Generator Categories guidance document.

What if my lamps have green tips?

Some fluorescent lamp manufacturers have created "green tipped" lamps that they claim are not hazardous. Although it's true that green tipped lamps contain less mercury than other lamps, this may not be enough for the green tipped lamps to avoid being regulated as hazardous waste. For the lamps to be non-hazardous, and therefore not subject to the hazardous waste rules, the laboratory test results must be less than all the regulatory limits found in Ohio Administrative Code (OAC) rule 3745-51-24. Some examples are:

- mercury - 0.2 mg/L;
- cadmium - 1.0 mg/L;
- lead - 5.0 mg/L;
- and barium - 100.0mg/L.

When you are done using any lamps at your facility, and are disposing or recycling them, they are a waste stream. According to OAC rule 3745-52-11, all wastes, except universal wastes, must be evaluated to determine if they are hazardous.



Non-hazardous

Lamps: While these lamps are not hazardous waste, they still contain low amounts of heavy metals such as mercury, lead and cadmium that can potentially harm the environment! Ohio EPA encourages recycling rather than disposing of non-hazardous lamps.

What if I have non-hazardous lamps?

If you determine your lamps are not hazardous, you have the option to manage them as solid waste. However, we recommend you manage them as UW even though the UW compliance standards are not required.

Lamp Recyclers in Ohio:

Environmental Recycling

527 E. Woodland Circle
P.O. Box 167
Bowling Green, OH 43402
wgrabowski@envrecycle.com
www.envrecycle.com
phone: (800) 284-9107
fax: (419) 354-5110

U.S.A. Lamp & Ballast Recycling

7806 Anthony Wayne Ave.
Cincinnati, OH 45216
www.usalamp.com
phone: (800) 778-6645
fax: (513) 641-4156

Resources:

Division of Hazardous Waste Management Web site: www.epa.state.oh.us/dhwm

If you have more questions about hazardous waste please check the Answer Place, call the DHWM Regulatory Services Unit at (614) 644-2917, or contact your local district inspector.

Universal Waste Rules for Handlers of Lamps

DHWM Guidance Document

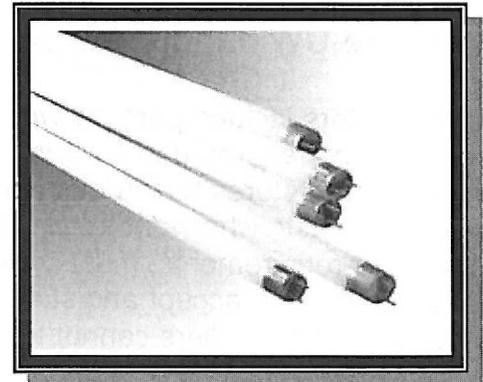
Date: June 2005

Purpose:

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Background:

Lamps have been added to Ohio's list of universal wastes (UW). The list of UW includes certain suspended and recalled pesticides, mercury-containing thermostats, and discarded batteries. When lamps were added to the list of universal wastes, Ohio revised the classification of hazardous lamps in the hazardous waste program.

Universal Waste Rules for Handlers of Lamps

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Non-hazardous Lamps: Ohio EPA recommends recycling lamps that do not exhibit hazardous waste characteristics. While these lamps are not hazardous waste, Ohio EPA encourages recycling rather than disposal. Non-hazardous lamps still contain low amounts of heavy metals such as mercury that could potentially harm the environment.

Who are UW handlers?

UW handlers include persons who generate, receive and store, but do not treat, dispose of or recycle UW generated elsewhere. Ohio’s hazardous waste rules state that a person who receives and stores hazardous waste is required to have a storage permit. Generators of universal waste who want to take advantage of the UWR instead of the hazardous waste generator requirements, must comply with all UW handler requirements. The UWR allows these persons to accept and store UW from off-site without having to obtain a storage permit. However, UW handlers cannot treat, dispose of or recycle UW.

What are the UW handler categories?

UW handlers are classified into two categories based on the quantity of UW waste they accumulate at any time:

- small quantity handlers [accumulate less than 5,000 kilograms (11,023 pounds) of UW (not by type) at any time], or
- large quantity handlers [accumulate more than 5,000 kilograms (11,023 pounds) of UW (not by type) at any time].

If a small quantity UW handler accumulates more than 5,000 kilograms of UW on-site at any time, they must comply with the large quantity UW handler requirements for the remainder of the calendar year. All generators have the option of handling their UW under the UWR or under Ohio’s hazardous waste generator requirements found in OAC Chapter [3745-52](#).

Universal Waste Rules for Handlers of Lamps

Note: UW should not be counted when making quantity determinations for hazardous waste generator categories (i.e., conditionally exempt small quantity generators (CESQGs), small quantity generators (SQGs) and large quantity generators (LQGs)). Universal waste handlers' status levels should not be confused with hazardous waste generator status levels.

May I use a lamp crusher to crush the lamps I generate?

The UWR prohibits handlers from crushing lamps. If you are the lamp generator and you want to continue crushing them, you have the option of managing those lamps under the hazardous waste generator requirements in OAC Chapter [3745-52](#). You cannot send crushed hazardous lamps to an unpermitted handler. They must be transported by a registered hazardous waste transporter to a permitted hazardous waste facility accompanied by a hazardous waste manifest. While some commercially available lamp crushers are designed to control mercury emissions when properly maintained, please beware that due to the unique properties of mercury, there is a high potential for exposure to harmful mercury vapors when lamps are crushed.

What are the packaging requirements for UW lamps?

Lamps must be packaged to minimize breakage and must be designed to contain potential releases due to breakage. Some examples of acceptable packaging include double- or triple-ply cardboard containers with closed lids or packaging in which new lamps are shipped from the manufacturer. Broken, damaged or leaking lamps can be sent to permitted recycling facilities. Acceptable storage for broken lamps includes a closed 55-gallon steel drum or a closed wax fiberboard drum.

Warning: Because of its unique properties, mercury from broken or crushed lamps can become airborne at room temperature and can seep into cracks and porous materials such as cloth, carpet or wood, slowly emitting vapors over a long period. Immediate and proper containment of a mercury release is very important. For information on mercury containment and clean up, contact your local fire department or call Ohio EPA's spill hotline at (800) 282-9378.

What are the labeling requirements for UW lamps?

Universal waste lamps or their containers must be clearly marked "Universal Waste Lamp(s)," "Waste Lamp(s)" or "Used Lamp(s)." The containers should never be labeled "Hazardous Waste" unless being managed as such.

UW handlers must be able to demonstrate the accumulation time for all universal wastes. Accumulation begins with the date the lamps became a waste or were received. The handler may make this determination by:



- placing the lamps in a container and marking or labeling the container with the earliest date that any UW in the container became a waste or was received;
- marking or labeling the individual item of UW (i.e., each lamp) with the date it became a waste or was received;
- maintaining an inventory system on-site that identifies the date the lamp(s) being accumulated became a waste or was received;
- maintaining an inventory system on-site that identifies the earliest date that any UW in a group of UW items or a group of containers of UW became a waste or was received;
- placing the UW in a specific accumulation area and identifying the earliest date that any UW in the area became a waste or was received; or
- any other method which clearly demonstrates the length of time that the UW has been accumulated from the date it became a waste or was received.

Am I required to notify Ohio EPA of my UW activities?

Small quantity UW handlers and transporters are not required to notify Ohio EPA of their activities and are not required to obtain an EPA hazardous waste ID number. Large quantity UW handlers must notify Ohio EPA in writing and must obtain an EPA hazardous waste ID number prior to exceeding the 5,000 kg storage limit. Large quantity UW handlers that have previously notified Ohio EPA of their hazardous waste activities and who have received an EPA identification number are not required to renotify. For specifics on the notification requirements, see OAC rule 3745-273-32.

How long may I accumulate UW lamps?

If you are a UW handler, you may accumulate UW fluorescent lamps on-site for up to one year regardless of your status. If greater than a year accumulation is required, you must be able to prove that the accumulation is necessary in order to facilitate proper recovery, treatment or disposal.

Who can I send or take my UW lamps to?

As a universal waste handler, you can send or take lamps only to another UW handler or to a permitted (if in Ohio) destination facility. If you are sending your UW lamps to a facility outside Ohio, the out-of-state destination facility must be authorized by that state to accept lamps.

Am I required to manifest my UW lamps?

No. UW handlers are not required to manifest their off-site shipments. However, all UW handlers must ensure delivery of their universal waste to another UW handler or to a permitted destination facility as defined in OAC rule 3745-273-09(B).

Do I need to use a special transporter like I do for my other hazardous waste?

No. UW handlers are not required to use a certain transporter. Universal waste transporters, however, must comply with DOT packaging/labeling requirements, transfer facility storage requirements and must immediately contain all releases of universal waste in the event of a spill.

May I transport my own universal waste lamps?

Yes. Both small and large quantity universal waste handlers can transport their universal waste lamps to either another universal waste handler or to a universal waste destination facility if they comply with the universal waste transporter requirements in OAC rules 3745-273-50 through 3745-273-56.

What are my record-keeping requirements?

If you are a small quantity UW handler, you are not required to keep off-site shipment records of UW. If you are a large quantity UW handler, you are required to retain shipment records received on-site and shipments sent off-site for at least three years. For specifics, see OAC rule 3745-273-39.

For more information on Ohio's UWR, please see our guidance document entitled, "Universal Waste Rule" and our universal waste handler requirements summary table available on our Web page. If you have questions regarding information contained in this guidance document, please contact Ohio EPA's Division of Hazardous Waste Management's Regulatory Services Unit at 614-644-2917 or visit our Web site.

by Rose McLean and Jeff Mayhugh

This article is intended to clarify two questions that we frequently receive about the regulatory status of aerosol cans: When are aerosol cans considered empty? If aerosol cans have not been punctured, must they be managed as hazardous waste (when the can is not being reclaimed, reused or recycled)?

The main focus of both these questions hinges on what you plan to do with the "empty" can. You may want to refer back to the *Winter 2002 Notifier* newsletter for more information about management requirements.

First, understand that you are required to evaluate both the contents and the can itself. When evaluating the contents, there is a two-pronged test to determine if the can is empty:

- it must be emptied of all waste using practices commonly employed to remove materials from that type of container, that is, pouring, pumping and aspirating; (the easiest way to do this is to use a can puncturing device)
- contain less than or equal to 2.5 centimeters of liquid residue or no more than three percent by weight of the total capacity of the container remains.

If the aerosol can did not contain a material that would be a hazardous waste now that it will be disposed of, then the material remaining in the can is not subject to any hazardous waste rules, including the *RCRA empty* rule (which determines when a container is empty). If the aerosol can contains a hazardous waste, either *listed* or *characteristic*, then its contents will be subject to the hazardous waste rules. However, the can itself must be evaluated regardless of its contents.

When are aerosol cans considered empty?

To answer that, you must first determine what the aerosol can contained. The definition of an empty aerosol can depends on the can's original contents and the planned method of disposal. The best way to manage aerosol cans is to recycle both the can and the contents so as to avoid having to make an empty container determination (and eliminating the need to read any further).

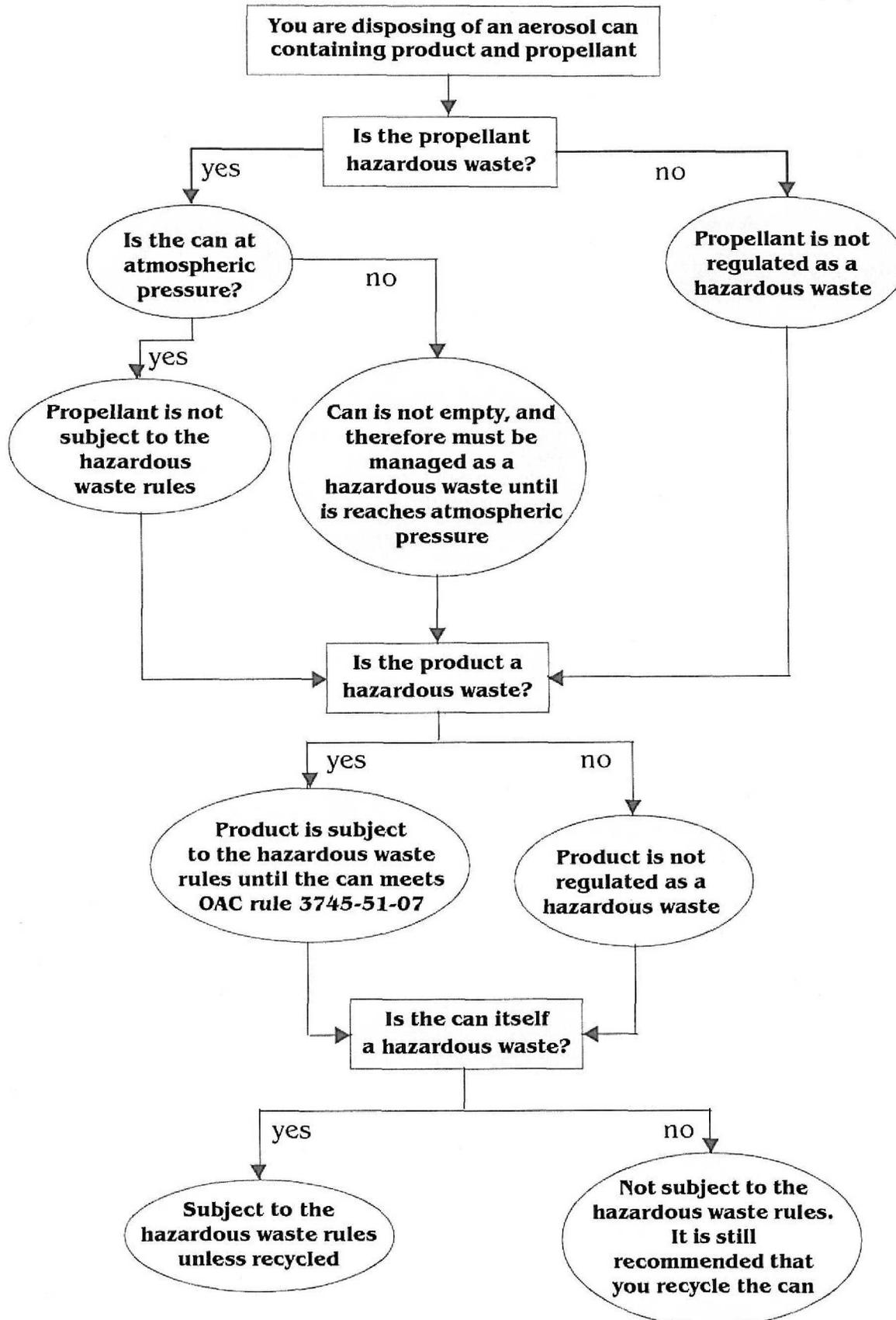
Are you planning to throw the can away?

If so, here are the management topics that affect you:

- If the aerosol can contains only a hazardous compressed gas, such as butane used to calibrate your air monitoring equipment, then the can is empty once it reaches atmospheric pressure [see Ohio Administrative Code (OAC) rule 3745-51-07(B)(2)]. Once the can is empty, any hazardous waste remaining in it is not subject to Ohio's hazardous waste rules. However, since you are disposing of the container, you would still be required to *evaluate* the shell (can) prior to disposal. If the shell is hazardous, then you must manage it according to the applicable hazardous waste *regulations*. Please note that you can use *generator knowledge* to determine whether the shell is hazardous.
- If the aerosol can contained a product such as paint or solvent, and you have emptied it according to normal methods of emptying an aerosol can, then the can is not empty until no more than 2.5 centimeters of liquid residue remains on the bottom of the container or no more than three percent by weight of the total capacity of the container remains [see OAC rule 3745-51-07(B)(2)]. Since the aerosol can houses two substances, the liquid product and the compressed gas propellant, the container is not empty until both materials meet the requirements for empty containers (both bullet items). Once both materials meet these requirements, then you must evaluate the shell (can) prior to disposal. Evaluate the shell (can) according to OAC rule 3745-52-11.

continued on page 6...

Example of How to Determine if Your Aerosol Can is Empty



Are you planning to recycle the can?

If so, here are the management topics that affect you:

- If the aerosol can contained only a compressed gas, such as the previous example, then the can is empty once it reaches atmospheric pressure. Once that occurs, then it no longer contains a hazardous waste. Since you are recycling the container, it is not subject to hazardous waste rules.
- If the aerosol can contained a product such as paint or solvent, then once it no longer contains a significant amount of liquid, it meets the definition of scrap metal and would be exempt from regulation under OAC rule 3745-51-04(A)13).

According to U.S. EPA, aerosol cans that have been punctured so that most of the remaining liquid may drain from the can (for instance, at either end of the can), and drained (for example, with punctured end down), would not contain significant liquids (view the U.S. EPA letter). However, although recommended, there is no specific regulation requiring that aerosol cans be punctured. That is unless you maintain a can puncturing unit at your facility, wherein puncturing would be considered "a practice commonly employed to remove materials from aerosol cans," and therefore, your aerosol cans must be punctured in order to be considered empty. In addition, many scrap metal recyclers require that cans be punctured.

If aerosol cans are not empty and have not been punctured, must they be managed as hazardous waste (can and contents if they are not being reclaimed, reused or recycled)?

The best way to manage aerosol cans is to recycle both the can and the contents. When managed this way, they are not subject to the hazardous waste rules.

If you intend to throw away non-empty aerosol cans, you must evaluate the contents to determine if they are hazardous. If the contents are hazardous waste, either *listed* or *characteristic*, then they will be subject to the *hazardous waste rules*. In addition, the can itself must be evaluated regardless of its contents. If the shell (can) is listed or characteristic, then it must be managed according to the hazardous waste rules. 

New Option for CESQGs in Northeast Ohio

by Pam Allen

Are you a conditionally exempt small quantity generator (CESQG) in Northeast Ohio?

If so, you may have a new option for managing your hazardous waste, universal waste and used oil. The BIZMATSM center is open for business and is accepting certain wastes from CESQGs in Summit, Cuyahoga, Stark, Portage, Medina and Wayne counties. The majority of the material brought to the center will be recycled.

BIZMATSM is operating as a two-year pilot program and is managed by the Ohio Organization for Recycling and Reuse (OORR), a non-profit organization. Heritage Environmental Services oversees the daily operations.

As participants, CESQGs will be able to bring their waste to BIZMAT. The cost to dispose of as much as 220 pounds of material is \$95; \$75 of that fee will go toward paying the operating costs for the center and \$20 will go into a fund established to help businesses finance brownfield restoration projects.

Additional information is available at www.bizmatcenter.org. 