

## Ohio Hazardous Waste

# Notifier

A Publication of Ohio EPA, Division of Hazardous Waste Management

## Ohio EPA Focuses on Cessation of Regulated Operations (CRO) Program Outreach

By Ralph McGinnis and Helen Miller

Abandoned factories and warehouses can be attractive playgrounds for children and shelters for vagrants. Unfortunately, some businesses abandon industrial facilities without cleaning or securing the dangerous chemicals that were stored, used or treated there. If someone releases these harmful chemicals into the environment, they may cause imminent or substantial threat to public health or the environment.

In 1987, vandals entered the abandoned Dayton Tire and Rubber facility to remove copper cores from several large transformers. This action resulted in the release of polychlorinated biphenyl (**PCB**) oil, which made its way into a nearby creek. The clean up cost was approximately \$8 million and took three years to complete. The U.S. banned the manufacture of PCBs in 1977 because of evidence that they build up in the environment and can cause harmful health effects. This and similar incidents led to the creation of the CRO program.

In 1996, Ohio passed a law to address certain businesses that close, move, or are sold to ensure that their facilities are free from dangerous chemicals before business owners vacate the properties. This law, codified at Ohio Revised Code (ORC) Chapter **3752** and Ohio Administrative Code (OAC) Chapter **3745-352**, led to the creation of the Cessation of Regulated Operations (**CRO**) program. This year, Ohio EPA's Division of Hazardous Waste Management (**DHWM**) is reaching out to associations like the Fraternal Order of Police, Ohio Fire Chiefs' Association, Ohio Manufacturer's Association, wastewater pretreatment coordinators and other agencies to educate them about the CRO program.

Law enforcement officials, wastewater pretreatment coordinators, trade associations and other agencies are often the first entities aware of businesses that cease operations. For this outreach effort, we hope to raise awareness about the CRO program by asking certain organizations to distribute information to affiliates or other businesses with whom they work. We have drafted a short article that will be available in the near future about the CRO program that associations can include in a newsletter or information packet.

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### **Why was the CRO program created and which businesses must comply?**

If your business is required to submit hazardous chemical reports to the State Emergency Response Commission (**SERC**) and you stop operations temporarily or permanently, you need to comply with the CRO law. Ohio designed the CRO law to ensure that facilities that cease regulated operations do so in a manner that is protective of public health, safety and the environment.

### **What does cessation of regulated operations mean?**

Cessation means discontinuing or stopping regulated operations. Regulated operations refer to the production, use, storage or handling of regulated substances.

### **Are some businesses exempt from CRO?**

Public utilities, oil/gas production operations and underground storage tanks regulated by the State Fire Marshal's Bureau of Underground Storage Tank Regulation (**BUSTR**) are exempt from CRO. Authorities other than Ohio EPA regulate discontinuation of operations at these types of entities.

### **What are my responsibilities as an owner or operator?**

You must take responsibility for the regulated substances at your facility when you permanently cease regulated operations (for example moving, selling or closing your business).

#### **Within 30 days you must:**

- notify Ohio EPA, the local emergency planning committee (**LEPC**) and the local fire department;
- secure the facility; and
- designate a contact person.

#### **Within 90 days you must:**

- submit a chemical inventory form;
- submit current list of chemicals or Material Safety Data Sheets (**MSDS**) if chemicals are not on the inventory form;
- remove all regulated substances from the facility; and
- certify removal to the director of Ohio EPA.

### **What if I'm only going to stop operating temporarily?**

As long as you resume operations within a year, you are not required to comply with all of the CRO program requirements. However, within 45 days you must certify to the director of Ohio EPA that you will resume within a year. If you intend to resume operations but it will take longer than a year, you must receive a waiver from the director.

### **What are my responsibilities as a new owner or operator of a facility that stopped operating temporarily?**

#### **After you have purchased the facility, you must do the following:**

- Within 15 days notify Ohio EPA;
- Within 30 days resume operations or permanently cease operations; or
- Within 45 days request a waiver or comply with waiver issued to previous owner or operator.

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### If the owner/operator of the facility does not comply, who is responsible for the facility complying with CRO?

- The first mortgage holder;
- A fiduciary (holds legal title to the facility for an estate or trust, or can be a lessee);
- Indentured trustee; and/or
- Appointed receiver.

In general these entities will need to submit a notice to Ohio EPA, the LEPC and local fire department. They will also need to secure the facility until they no longer hold an interest in the property or all regulated substances have been removed.

### If I deactivate my RCRA EPA I.D. number, do I need to comply with the CRO program?

You must comply with the CRO program if you are subject to SERC annual chemical reporting, cease regulated operations and are not exempt from the program.

For more information on CRO, visit our [web site](#). If you have any questions about the CRO program, contact Ralph McGinnis at (614) 644-3065, or by [e-mail](#).

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## Fluorescent Lamp Questions Answered

by Rose McLean

We receive lots of questions about fluorescent lamps. Homeowners and businesses want to know how to properly manage intact lamps when they've reached their end-of-life: who will take them and how do they get lamps to the proper disposal or recycling facility? They also want to know how to properly clean up a lamp that has broken. This article will answer all of these questions.



### First let's start with businesses.

Businesses must **evaluate** their intact lamps and if they are managing lamps under Ohio's **hazardous waste rules**, send hazardous lamps to a permitted treatment, storage and disposal facility (**TSD**) using a hazardous waste manifest. If your business manages lamps as a universal waste, you must comply with some simple universal waste **management standards** and send them to a universal waste handler or permitted universal waste destination facility.

### But what does that mean?

#### How do businesses manage lamps as hazardous waste?

If a business generates more than 220 pounds per month of hazardous waste, including lamps, it is a small quantity generator (SQG). If a business generates more than 2200 pounds of hazardous waste per month, it is a large quantity generator (LQG). Both SQGs and LQGs must properly package and label lamps according to Ohio Administrative Code (OAC) Chapter **3745-52** prior to shipping them off-site.

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## Lamp questions answered continued from page 3

The business must also have or obtain a **U.S. EPA identification number**, use a hazardous waste **transporter** with a U.S. EPA identification number and send lamps to a permitted **TSD**. If a business generates less than 220 pounds per month of hazardous lamps, then they are only required to properly evaluate the lamps and ensure their delivery, either by self-transporting or using a hired carrier, to a permitted.

*For reference, a single, four-foot bulb weighs approximately 0.83 pounds. You would need to generate approximately 265 lamps monthly to be considered an SQG, if this was the only hazardous waste that you generated during the month.*

### How do businesses manage lamps as universal waste?

The business must determine if it is a small or large quantity handler. This **chart** explains the requirements for each of the handler types. Small quantity handlers of lamps are required to properly package and label their universal waste lamps prior to shipment to a permitted universal waste destination facility or other universal waste handler. Large quantity handlers of lamps are required to notify Ohio EPA and obtain a U.S. EPA identification number, properly package and label universal waste, and ship lamps to a permitted universal waste destination facility or other universal waste handler.

Universal waste lamps must be packaged to minimize breakage and must be designed to contain potential releases due to breakage (the release of **elemental mercury** is a serious concern).

For more information, see our guidance document, **Universal Waste Rules for Handlers of Lamps**.

### What about broken lamps?

#### How do businesses manage broken, unused lamps?

Ohio EPA considers broken, unused fluorescent lamps to be off-specification commercial chemical products. Off-specification commercial chemical products that are reclaimed (processed to produce a usable product) are not considered to be a waste and hence not a hazardous waste. If they are destined for reclamation, Ohio's hazardous waste regulations (including any packaging requirements) would not apply. However, it is advisable that the lamps be packaged in a manner to prevent the release of **mercury** to the environment.

#### How should businesses manage broken, used lamps?

A used lamp that is broken accidentally can be managed as universal waste. While Ohio's **universal waste rules** state that a handler must store universal waste lamps in containers or packages that prevent breakage, and that they must manage lamps in a way that prevents the release of any component of the lamp to the environment, this does not prohibit a handler from managing unintentionally broken lamps as universal waste. However, it does prohibit a universal waste handler from crushing their lamps.

According to OAC rules **3745-273-13(D)** and **3745-273-33(D)**, universal waste handlers must immediately clean up and place in a container any lamps that are broken. Ohio EPA recommends packaging broken lamps in a closed 55-gallon steel drum or a closed wax fiberboard drum. The key is to minimize the chance for mercury to seep into cracks and porous materials such as cloth, carpet or wood, and slowly emit vapors over a long period.

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## Lamp questions answered continued from page 4

### How should businesses clean up and dispose of broken lamps?

Fluorescent light bulbs contain mercury sealed within the glass tubing. U.S. EPA recommends the following clean-up and disposal guidelines:

1. Open a window and leave the room for 15 minutes or more.
2. Carefully scoop up the fragments and powder with stiff paper or cardboard and place them in a sealed plastic bag.
  - Use disposable rubber gloves, if available (that is, do not use bare hands). Wipe the area clean with damp paper towels or disposable wet wipes and place them in the plastic bag.
  - Do not use a vacuum or broom to clean up the broken bulb on hard surfaces.
3. Place all clean up materials in a second sealed plastic bag.
  - Place the first bag in a second sealed plastic bag and put it in the outdoor trash container or in another outdoor protected area for the next normal trash disposal.
  - Wash your hands after disposing of the bag.
4. If a fluorescent bulb breaks on a rug or carpet:
  - First, remove all materials you can without using a vacuum cleaner, following the steps above. Sticky tape (such as duct tape) can be used to pick up small pieces and powder.
  - If vacuuming is needed after all visible materials are removed, vacuum the area where the bulb was broken, remove the vacuum bag (or empty and wipe the canister) and put the bag or vacuum debris in two sealed plastic bags in the outdoor trash or protected outdoor location for normal disposal.

## And what about homeowners?

### How do homeowners manage fluorescent lamps?

Homeowners are not subject to Ohio's hazardous waste rules and therefore are not required under Ohio's hazardous waste or universal waste rules to package and label their lamps or manage their lamps in any certain way [see (OAC) rule **3745-51-04(B)(1)**]. However, due to the fact that all fluorescent lamps contain mercury, Ohio EPA encourages homeowners to recycle their lamps.

Homeowners have a couple of recycling options available. The first option is to check with your local solid waste authority for upcoming **household hazardous waste collection programs**. Some solid waste management districts have coordinated a permanent location for household hazardous waste drop-offs. A few examples are in **Franklin County**, **Cuyahoga County** and **Hamilton County**.

Another option is to contact a local lamp recycler. Ohio EPA's Division of Hazardous Waste Management maintains a **listing of lamp recyclers** on our **Web page**.

While not encouraged, used lamps can also be safely packaged and disposed with your household trash. Double bag the lamps in two sealed plastic bags and carefully place the bags into your outdoor trash can. Go to **Energy Star's** Web page for more useful tips.

### Not-So-Fun Facts:

- Each year, an estimated 600 million fluorescent lamps are disposed of in U.S. landfills amounting to 30,000 pounds of mercury waste.
- The mercury from one fluorescent bulb can pollute 6,000 gallons of water beyond safe levels for drinking.

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### How do homeowners clean up a broken lamp?

According to Ohio Department of Health (**ODH**), currently there are no regulations that address mercury spills and the disposal of mercury contaminated items from private households. ODH instructs homeowners to remove all liquid mercury and mercury contaminated items, place those items in a double bag system and remove them from inside the residence.

The most important thing to remember is to **never use a vacuum**. A standard vacuum will spread mercury-containing dust throughout the area as well as potentially contaminating the vacuum. What you should do is:

- Keep people and pets away from the breakage area so that the mercury in the powder inside the bulb is not accidentally tracked into other areas.
- Ventilate the area by opening windows.
- Wear appropriate personal protective equipment, such as rubber gloves, safety glasses, old clothing or coveralls and a dust mask (if you have one) to keep bulb dust and glass from being inhaled.
- Carefully remove the larger pieces and place them in a secure closed container, preferably a glass container with a metal screw top and gasket seal like a canning jar.
- Next, begin collecting the smaller pieces and dust. You can use a disposable broom and dust pan or two stiff pieces of paper to scoop up pieces.
- Put all material into the glass container. Pat the area with the sticky side of duct, packing or masking tape. Wipe the area with a damp cloth or paper towels to pick up fine particles.
- Put all waste and materials used to clean up the bulb in the glass container and label it "Universal Waste - broken lamp".
- Take the container for recycling at a household hazardous waste collection event. Make sure your local household hazardous waste collection event collects mercury and mercury-soiled items. See the above list of locations. ODH also recommends contacting a hazardous waste recycling company for removal. Or you can seal the bulb in two sealed plastic bags and put it into the outside trash or other protected outside location.

The next time you replace a bulb, consider putting a drop cloth on the floor so that any accidental breakage can be easily cleaned up.

For additional guidance for homeowners, refer to ODH's [mercury spill guidance](#) online, Energy Star's Frequently U.S. EPA's fact sheet, [Information on Proper Disposal of Compact Fluorescent Light Bulbs \(CFLs\)](#) and Ohio EPA's guidance [What Consumers Should Know](#). Information on mercury spill clean-ups is also available on Ohio EPA's [Answer Place](#). 

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## Resources for Your Business on Ohio EPA's Web Site

By Helen Miller

If you haven't browsed Ohio EPA's web site recently, here are some new and updated resources you might find helpful.

### Ohio EPA's Publications Catalogue

This catalogue can help you quickly locate resources like Agency fact sheets, guidance documents, checklists, brochures, newsletters and reports. Resources are continuously added to this catalogue; as it does not include every publication from Ohio EPA, it should not be used as your only source of information. We recommend you visit other parts of our Web site for more specific information or use the Search feature located on the left side of our home page.



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### Recyclers and Environmental Service Providers

Various divisions in our Agency used to maintain lists of known recyclers and environmental service vendors. These have been consolidated and located in a central place on our Office of Compliance Assistance and Pollution Prevention (OCAPP) Web site. The searchable lists are intended to help businesses find recyclers and other service vendors. (Ohio EPA does not endorse any specific vendor or product and does not represent that any list is complete.) You can select a category and a county to find vendors that serve your area. Some examples of categories are: computer and electronic equipment, antifreeze, used oil and wooden pallets. Many of the listings contain descriptions of the services and Web links to those companies.

### OMEx: Ohio's Materials Exchange

Materials exchange programs provide a mechanism for recycling and reusing unwanted materials. The exchange service provider maintains and distributes listings of materials available and materials wanted from participants. Through a materials exchange, one company's waste can become another company's raw material. Any material that is available from one business and potentially wanted by another can be a part of a materials exchange.



The purpose of OMEx is to disseminate information on surplus and/or waste materials available from or wanted by industrial and commercial entities. By aiding beneficial reuse of waste materials, OMEx helps reduce the need for landfill space, and encourages the proper management of solid and hazardous waste in order to avoid adverse effects on the environment.

Standard categories have been established for use in listing both materials available and materials wanted. Placing a listing or requesting contact information about a listing is easy and convenient through e-mail, the Web site or fax-on-demand. OMEx services are free to all users. OMEx is not intended as a medium for advertising products and/or services. OMEx is a cooperative effort between the Association of Ohio Recyclers, several state agencies and Waste Alternatives, Inc., which manages and operates OMEx.

### Answer Place

Do you have a technical question? In December 2005, Ohio EPA launched a frequently asked questions Web tool known as Answer Place. This provides quick and easy access to information, and allows you to pose questions directly to Agency staff. You can access the Answer Place by clicking on the logo from Ohio EPA's main Web page. Once you click on the site, you will see there are many questions and answers in the system, searchable by keyword.

If you do not find the information you are looking for, use the "Ask a Question" feature. Your question will be forwarded to the appropriate Ohio EPA staff for a response. You may also create a personal login that allows you to track questions (including updates) that you have viewed or submitted.

### Electronic ListSerts

Electronic news services can provide you with quick and timely updates on events and news. Ohio EPA offers the following electronic (e-mail) news services:

- **Division of Air Pollution Control**
- **Division of Drinking and Ground Waters**  
Electronic mailing lists are on the bottom of the menu on the right side of the page.
- Division of Emergency and Remedial Response
  - **Brownfield Interested Party List**
  - **VAP Training Mailing List**
- **Division of Hazardous Waste Management**
- **Division of Solid and Infectious Waste Management**
- Division of Surface Water
  - **Permit-to-Install (PTI) E-Mail Updates**
- The Office of Compliance Assistance and Pollution Prevention 

# When to Report a Spill or Release of Hazardous Waste to Ohio EPA?

By Karen Hale

Below is a table that summarizes the spill reporting requirements under the hazardous waste rules for a spill or release of hazardous waste. In addition to our requirements, you may have reporting requirements under other regulatory programs such as Ohio EPA's divisions of Air Pollution Control, Surface Water and Emergency and Remedial Response; and U.S. EPA's SPCC, CERLA and PCB programs.

If you are	And you have	Need to Report?	Who to Contact
LQG <sup>1</sup> or Interim TSD <sup>2</sup>	Implemented your contingency plan due to a release or spill that could threaten human health or the environment <b>inside</b> the facility. [Ohio Administrative Code (OAC) Chapter <b>3745-65</b> ]	Yes	Notify immediately the Ohio EPA <b>emergency response team</b> at 1-800-282-9378 (24 hours a day, seven days a week). OAC rule <b>3745-65-56</b> . Within 15 days send a written report to your Ohio EPA Division of Hazardous Waste Management (DHWM) district office. OAC rule <b>3745-65-56</b> .
LQG or Interim TSD <sup>F</sup>	Implemented your contingency plan due to a release or spill that could threaten human health or the environment <b>outside</b> the facility.	Yes	Notify immediately: 1) Your local response agencies (when evacuation of local areas may be needed); 2) The Ohio EPA <b>emergency response team</b> at 1-800-282-9378 (24 hours a day, seven days a week) OAC rule <b>3745-65-56</b> . Within 15 days send a written report to your DHWM district office. [OAC rule <b>3745-65-56</b> ]
SQG <sup>3</sup>	The spill/release is not a threat to human health outside the facility and no waste was released to surface water or the environment.	No	N/A
SQG	The spill/release could threaten human health outside the facility or has reached surface water (for example, enters a storm drain).	Yes	Immediately notify the Ohio EPA <b>emergency response team</b> at 1-800-282-9378 (24 hours a day, seven days a week).
CESQG <sup>4</sup>	Not required to report spills under Ohio's hazardous waste rules.	No	N/A
TSD <sup>5</sup>	Implemented your contingency plan due to a release or spill that could threaten human health or the environment <b>inside</b> the facility, or Your permit contains a specific reporting requirement.	Yes	Notify immediately: 1) Your DHWM district office; 2) Your local response agencies (OAC rule <b>3745-54-56</b> ). Within 15 days send a written report to your DHWM district office (OAC <b>3745-54-56</b> ). Notify responders or Ohio EPA as required by your permit.

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If you are	And you have	Need to Report?	Who to Contact
TSDF	Implemented your contingency plan due to a release or spill that could threaten human health or the environment <b>outside</b> the facility; or Your permit contains a specific reporting requirement.	Yes	Notify immediately: 1) The Ohio EPA <b>emergency response team</b> at 1-800-282-9378 (24-hours a day, seven days a week; 2) Your local response agencies if evacuation of area may be needed (OAC <u>3745-54-56</u> ). Within 15 days send a written report to your DHWM district office (OAC <u>3745-54-56</u> ) Notify responders or Ohio EPA as required by your permit.

- <sup>1</sup> Large quantity generator (LQG)
- <sup>2</sup> Permit by rule treatment storage disposal facility (PBR-TSDF)
- <sup>3</sup> Small quantity generator (SQG)
- <sup>4</sup> Conditionally exempt small quantity generator (CESQG)
- <sup>5</sup> Permitted treatment, storage or disposal facility (TSDF)

**What if I find soil contamination on my site and I do not know how it became contaminated; must I report the contamination to Ohio EPA?**

No, there are no rules that require you to report soil contamination to Ohio EPA. However, if the contaminated soil is polluting the waters of the state (that is, runoff from the contaminated area is getting into a stream), you need to report this impact by calling our 24-hour spill hotline at 1-800-282-9378.



Ohio Hazardous Waste

## Notifier

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