

# Hazardous

UPDATE

# Waste

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**Hazardous Waste Update** is the Thurston County Business Pollution Prevention Program newsletter for small quantity generators of hazardous waste, such as auto recyclers and auto shops, print shops, schools, painters, fire chiefs, dentists, pesticide applicators, and marinas.

To be taken off or added to this mailing list, or to request this newsletter in an alternative format, please call 360-754-4111. The TDD line is 360-754-2933.

The Business Pollution Prevention Program, run by the Thurston County Public Health & Social Services Department, Environmental Health Division, works with businesses to reduce, safely store, and properly dispose of small quantities of hazardous waste. The county provides technical assistance, workshops, fact sheets, a disposal site, and a Hazardous Waste Line at 360-786-5457.

## Local Disposal Options for X-ray and Photographic Processing Wastes

X-ray and photographic processing wastes contain silver, which is a toxic and persistent heavy metal. As a result, all wastewater from imaging processes that contains silver must be properly managed. For many years, Don's Camera of Olympia has provided medical, dental and photographic businesses with free disposal of silver-bearing fixer waste. Don's Camera recently moved to a new location and



Silver recovery units, like this one at HazoHouse, remove silver from waste fixer before the treated waste can be disposed.

is not able to continue offering this service. We would like to take this opportunity to thank the owners and employees of Don's Camera for years of service to local businesses and their commitment to safely managing x-ray and photo processing wastes.

Silver-bearing waste must be either properly managed on-site utilizing appropriate treatment systems or treated off-site before disposal.

## Waste Management: Fluorescent Lamps

### Fluorescents are everywhere!

Whether you operate an automotive repair shop or a dental facility, there is one waste that is common to nearly all local businesses and small quantity generators: fluorescent lamps. Fluorescent lamps are energy efficient and provide substantial energy savings compared to traditional incandescent lighting, but they do have their drawbacks. All fluorescent lamps, including compact fluorescent bulbs, contain varying amounts of mercury, which is a toxic pollutant that possesses the unfortunate ability to remain in the environment for long periods of time.

Because many fluorescent lamps contain concentrations of mercury that cause them to designate as a hazardous waste, these lamps must be managed as a hazardous waste and recycled. Proper management was streamlined by Ecology's decision to add fluorescent lamps to the category of "Universal Wastes." Universal wastes are hazardous wastes that are used in quantity by many businesses (such as batteries, thermostats and fluorescent lamps) and that, to encourage proper recycling and disposal, carry streamlined handling and reporting requirements.

### Fluorescent lamps are easy to recycle!

In Thurston County, businesses have several options for recycling fluorescent lamps. Thurston County's moderate risk waste facility, HazoHouse, accepts fluorescent lamps from



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## Waste Management: Fluorescent Lamps

businesses that have small quantity generator status. Fees charged cover the cost of proper disposal.

HazoHouse is located at the Thurston County Waste and Recovery Center, off Hogum Bay Road in Hawks Prairie. Please call the Business Pollution Prevention Program at (360) 786-5457 for more information about disposing of wastes at HazoHouse.

Another local business, Motors and Controls Corporation, is approved to collect universal wastes, including fluorescent and other specialty lamps. Motors and Controls Corporation is located at 430 Carpenter Road SE in Lacey, and can be reached at (360) 438-3447.

Many lamp manufacturers have begun marketing and manufacturing “low-mercury” fluorescent lamps. These lamps have been manufactured in such a way to prevent the mercury from leaching from lamps, simulating what occurs when lamps are disposed in a sanitary landfill. Due to these changes in manufacturing, low mercury lamps do not designate as hazardous waste and can legally be disposed in the trash in Thurston County. However, the Business Pollution Prevention program strongly urges businesses to recycle all fluorescent lamps, including low mercury models.

Low mercury lamps will have green end caps, though some low mercury models have end caps with other colors, including gold. It is not always obvious if a lamp is low mercury simply by examining the markings on the lamp. Therefore, recycling all lamps makes waste disposal easier by minimizing the time spent on determining which lamps are low mercury and which are not.

In addition, recycling fluorescent lamps recovers all of the other materials in the lamp. Glass and metal components are collected at the lamp recycling facilities and are reintroduced into the manufacturing process



**Used fluorescent lamps should be recycled to safely recover the mercury contained inside each bulb - not placed in curbside trash or recycling bins.**

to be used in new lamps or other products. Lamp recycling is convenient, reasonably priced, and keeps valuable resources in the cycle of “use → collection → remanufacturing → use”.

## Frequently Asked Questions about Recycling Fluorescent Lamps

**Q:** I’ve been throwing fluorescent lamps away for years. Why can’t I do this anymore?

**A:** Every broken lamp adds to the overall amount of mercury that is released. The Washington Department of Ecology estimates that broken fluorescent lamps contribute 437-505 lbs of mercury to the state’s environment every year; a greater amount than either thermostats, dental office amalgam, auto switches, or thermometers.

**Q:** My business enjoys the benefits of fluorescent lamps, especially the energy savings. We’re planning to re-lamp our warehouse with even more energy efficient models. How should we manage the old lamps?

**A:** There is a good chance that your old lamps have a significant concentration of mercury inside them, and would designate as a hazardous waste. Therefore, your management option must be to have them recycled. Many lighting contractors will provide this service for you, but you should be sure to inquire about where your lamps will be taken once they are removed from your facility.

**Q:** Can I recycle fluorescent lamps with glass jars and bottles?

**A:** No, fluorescent lamps must be handled and recycled by a certified lamp recycler. To package lamps for recycling, do not tape the lamps together. Return spent lamps to their original box if available, or wrap them in newspaper to protect from breakage.

**Q:** I really want to purchase low-mercury lamps, because I think it is easier to throw them away than recycle them. Where can I get these lamps?

**A:** Low-mercury lamps are available in many retail stores and through industrial supply stores. Look for labels that indicate “low-mercury content.” However, recycling is the preferred lamp disposal option, since even low-mercury lamps release some amount of mercury when broken in dumpsters. We urge all businesses to recycle all of their fluorescent lamps to recover resources and protect workers.

**Q:** My business doesn't generate any hazardous wastes besides fluorescent lamps. Is there a way to recycle them without making an extra trip to a location that will accept them?

**A:** Look into recycling your lamps through a pre-paid recycling program. Participating businesses purchase a shipping container, fill it with old lamps, attach a pre-paid mailing label, and ship the package using an approved common shipper. Our program can provide more details about these programs. However, after comparing the costs, it may be less expensive to make that extra trip to a local disposal location.

**Q:** I have some lamps at my business that aren't regular fluorescent lamps. I really don't know what they are or how they need to be handled. What should I do?

**A:** Your best bet is to carefully transport them out to the HazoHouse facility. Your lamps could possibly be a type of high-intensity discharge or mercury vapor lamp. Our staff will have a better idea of what kind of lamps they are, and how they need to be managed. When you visit HazoHouse, you will be asked to register your business as an authorized user, and you will be billed to cover the cost of waste disposal. Once you're registered at HazoHouse, you'll be able to dispose of other hazardous substances at the facility.

## Thurston County Business Pollution Prevention Program 2006-2007 Outlook

Each year, specialists with the Business Pollution Prevention (BPP) Program together decide which groups of local businesses will be asked to participate in technical assistance campaigns. In general, the businesses either belong to a common industry type (i.e. dentists) or are located in a designated geographic area, such as one of the local municipal wellhead protection areas.

Over the past two years, the BPP Program has provided technical assistance to a diverse audience. Specialists have worked with many types of businesses, including those that generate some form of imaging waste, such as medical, veterinary and dental offices; fleet maintenance facilities that manage an array of hazardous waste streams; local dry cleaners; and auto recyclers.

Specialists conducted hundreds of site visits over the course of these campaigns, and found that most businesses were properly storing and disposing a majority of their hazardous materials and wastes. Of the businesses that needed the additional technical assistance, nearly all are currently in compliance with the Thurston County Nonpoint Source Pollution Ordinance. This ordinance requires proper storage, handling, and disposal of all hazardous substances in an effort to protect local drinking and surface water quality.

In 2006, the Business Pollution Prevention Program will look at smaller groups of businesses, specifically those that may produce a unique waste stream, and may not fit into one of the larger campaigns. Examples of these business groups include taxidermists, HVAC contractors, carpet cleaning and janitorial services, automotive detailing businesses, powder coating businesses, and metal fabricators. These campaigns mark the first time that our program has contacted or worked with many of these business groups, and we anticipate that we will learn as much about their businesses as they will from us during these campaigns.

In 2007, the Business Pollution Prevention Program will launch an extensive automotive maintenance campaign. Automotive shops also have a significant quantity of hazardous products and wastes, and our goal is to re-establish baseline information for this large business sector. This campaign will likely run into 2008.

In addition to many business-type campaigns, BPP Program specialists will also continue working with existing and new businesses in local wellhead protection areas. These campaigns are a collaborative effort between the Business Pollution Prevention Program and the water resource programs of local municipalities.

Our program is happy to work with any business to determine if they are classified as a small quantity generator, and make recommendations on improving hazardous substance handling, storage, and disposal. We believe that our approach focuses not only on ensuring that businesses are handling hazardous substances properly, but also identifies other areas where businesses can improve safety and/or efficiency of their operations.

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## Local Disposal Options for X-ray and Photographic Processing Wastes

Depending on the quantity of waste you produce, there are several disposal options:

### Drop-off Services

Currently, there are two drop-off locations in Thurston County that accept used fixer for proper treatment:

- Thurston County HazoHouse: Free drive-thru service. Hours of operation are Friday, Saturday, Sunday, and Monday 8:00 a.m. - 5:00 p.m. Call the Business Pollution Prevention Program at (360) 786-5457 for more information.
- LOTT Alliance Budd Inlet Treatment Plant: Free drop-off service. Hours of operation are Monday through Friday, 12:00 p.m. - 3:00 p.m. Please call Ken Butti at (360) 528-5708 for more details.

Thurston County and the LOTT Alliance recently purchased and installed on-site silver recovery units at both HazoHouse and the Budd Inlet Treatment Plant. These units were installed to serve the local medical, dental and photographic community who generate small quantities of used fixer wastes.

Both Thurston County and the LOTT Alliance have a limited number of free containers that businesses can use to collect and transport waste fixer. Labels for containers of waste fixer and information about transporting of wastes can be obtained by calling (360) 786-5457.

### Pick-up Services

The following companies offer pick-up services in Thurston County. Disposal fees apply.

- CMX Corporation (800) 869-7191
- Hallmark Refining (800) 255-1895
- Safety-Kleen (800) 669-5948
- X-ray Used Fixer Service (253) 318-9921

### On-site Silver Treatment

For businesses generating larger quantities of silver waste, installing a silver recovery system may be a cost-effective solution to managing this waste. These systems remove silver from your waste x-ray and photo processing solutions using chemical recovery cartridges (CRCs). Once the recovery system removes the silver, the resulting non-hazardous wastewater can be discharged to a municipal sewer system.

These systems may not be economical for businesses producing small quantities of silver-bearing waste due to startup costs, refining fees, and regular maintenance expenses.

Regardless of the way your business chooses to manage waste x-ray and photo processing wastes, no processing wastes may ever be disposed into on-site septic or local stormwater systems.

For more details about managing x-ray and photo processing wastes, please contact the Business Pollution Prevention Program at (360) 786-5457.



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