

# Hazardous Waste

UPDATE

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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, call 360-754-4111 or e-mail [donnetr@co.thurston.wa.us](mailto:donnetr@co.thurston.wa.us). We welcome your questions and suggestions!

The Business Pollution Prevention Program, run by Thurston County Environmental Health, 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 an educational Hazardous Waste Hotline at 360-786-5457.

## Are Your Wastes Universal?

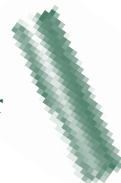
Have you been throwing out batteries and fluorescent lamps? These and other common products have properties that classify them as hazardous wastes, yet they are often tossed in the trash.



The U.S. Environmental Protection Agency (EPA) designed the Universal Waste Rule to encourage recycling and proper disposal of certain hazardous wastes. The Universal Waste Rule also provides regulatory relief for small businesses. It is expected to save companies more than \$70 million per year in compliance costs and reduce time spent on paperwork by over 500,000 hours per year.

### The Universal Waste Rule provides regulatory relief in several areas:

- Universal Wastes do not count towards waste generation totals to determine generator status. This helps many small businesses remain under small quantity regulations.
- Manifests are not required when transporting Universal Wastes. Small quantity handlers are not required to keep records of Universal Waste shipments.
- Waste accumulation time is longer and quantity limits are larger.



## Report from the Field: Small Engine Repair Campaign

Of all the types of small businesses that generate hazardous waste in Thurston County, the automotive industry is the biggest. There are hundreds of auto repair shops alone. Many have received technical assistance visits from the Business Pollution Prevention Program. This campaign was the county's first look at businesses that service and repair small engines not normally associated with cars and trucks. Businesses included lawn and garden equipment, wood cutting equipment, motorcycles and all terrain vehicles, marine engines, portable pumps and generators, and the like.



The county visited ten marine engine repair shops.

In 2001, the county identified and contacted 30 small engine repair shops that managed hazardous materials. Twenty-eight agreed to a visit.

A county Hazardous Waste specialist then collected information about each business' source of drinking water, storm water controls, solid waste and wastewater disposal, floor drains, fuel tanks, historical land use, hazardous waste generation, and spill/emergency response preparedness. Often, fact sheets about specific wastes or management practices were left with the business.



## Universal Waste in Washington

In 1998, the Washington Department of Ecology adopted two EPA categories of Universal Waste – batteries and mercury-containing thermostats. In 2000, fluorescent tubes were added to the list. Ecology did NOT adopt another category available through the EPA rule, waste pesticides.

**1) Batteries:** All batteries that are hazardous waste should be managed under the Universal Waste Rule, except for lead-acid batteries. Lead-acid batteries may continue to be managed under the current exemption listed in WAC 173.303.520. The types of batteries managed under the Universal Waste Rule include alkaline, nickel-cadmium, mercuric oxide, alkaline manganese, carbon zinc, button cell mercuric oxide, silver oxide, and lithium. It is a good idea to separate different type of batteries. Since recycling methods may differ, some recyclers may not accept mixed batteries.

**2) Mercury Thermostats:** A thermostat is a temperature control device that contains a glass ampule with liquid mercury. These types of thermostats can be easily recycled for their mercury content. However, this does not include mercury switches, which should be managed as hazardous waste. Many non-mercury thermostats and switches are now available so you can avoid dealing with a mercury product in the future.



*Thanks to Mass. DEP for thermostat photo.*

**3) Used Lamps:** The following types of lamps should be managed as Universal Waste unless you have information showing that the lamps are not a dangerous waste: fluorescent; compact fluorescent; HID (mercury vapor, metal halide, high-pressure sodium); neon; and any other lamps that are considered hazardous waste.

## CRT and Related Electronic Wastes

In April 2002, Ecology announced an interim policy for cathode ray tubes (CRTs) and related electronic wastes, and is considering adding them to the list of Universal Wastes or conditionally excluding them. (CRTs are the video display components of television and computer monitors.) For now, as long as CRTs are properly recycled, they are not subject to full regulation. The glass in CRTs contains lead. For more information, see Ecology's notice at <http://www.ecy.wa.gov/pubs/0204017.pdf>.

"This policy is only one part of an overall strategy for addressing computer-related wastes," says Chipper Hervieux of Ecology. "It makes it easier for those who recycle their equipment." Hervieux goes on to say that it is "important to note that this policy applies only to equipment that is recycled. Full dangerous waste regulatory requirements will continue to be in effect for waste that is disposed."

Another waste on the universal waste "horizon" is mercury-containing equipment, such as barometers, meters, temperature gauges, pressure gauges, and sprinkler system contacts. Stay tuned for more word from the U.S. EPA and Ecology on this one.

## Technical Assistance Campaigns

The Business Pollution Prevention Program has several technical assistance campaigns planned or underway for 2002-2003. The purpose for the campaigns is to help identify best management practices for businesses that generate small quantities of hazardous waste and to confirm their compliance with the Thurston County Nonpoint Source Pollution Ordinance. Questions about these campaigns? Call 360-786-5457.

## Wellhead Protection Area Campaign

The next wellhead protection campaign will be for the Allison Springs well in west Olympia and for the City of Lacey's wells. Wellhead protection areas supply the groundwater to public wells. These sensitive areas receive special attention to protect drinking water from hazardous waste contamination.

Roughly 35% of the small businesses with hazardous waste will be visited. The way the program is structured, every business in a wellhead protection area will be visited some time every six years – some more frequently than others, based on risk.

Businesses can cut down on visits by applying good management practices, keeping disposal receipts, and placing hazardous materials in secondary containment.

This is the second round of technical assistance visits for the Allison Springs and Lacey wellhead protection areas.

## Dental Offices

Dentists' offices contain mercury amalgam, silver, and other hazardous chemicals. These metals are discharged into the city sewer system and eventually find their way into Puget Sound. Since heavy metals do not decompose, they gradually accumulate in the environment, potentially contaminating fish and other wildlife.

Thanks to new technology, there is a simple solution to this problem.

Dozens of companies now make special filters that can remove mercury and silver from dental wastewater. These filters can easily be installed in dental offices, removing up to 99% of metals.

Environmental regulators across the nation are working to reduce metal waste from dental offices. Thurston County will conduct a technical assistance campaign to help dentists reduce their heavy metal discharge. Their goal is to be proactive and provide dentists with the resources necessary to comply with changing regulations regarding heavy metals. ♦



**Dental amalgam can contain 50% mercury, 25% silver, and 25% a mixture of copper, zinc, and tin.**

The Hazardous Waste specialist assessed hazardous waste use and management during the on-site visit. When appropriate, the specialist suggested adopting Best Management Practices (BMPs) to reduce hazardous waste, use less toxic products, recycle, and make improvements in housekeeping and hazardous waste management. Twenty-five types of BMPs were identified and could be suggested for small engine repair shops.

Many businesses were already doing a number of the BMPs. One-third or more of the businesses already recycled waste oil, solvents, and rags; properly disposed of gasoline; and had an on-site spill kit. On the other hand, only one business each recycled scrap metals and brake fluid, properly disposed of oil-absorbent pads, substituted citric cleaner as a less-toxic product, and sealed floor drains.

The most commonly suggested BMPs were to improve labeling and have Material Safety Data Sheets (MSDS) on-site. In all, businesses voluntarily put into effect 35 of the 36 BMPs suggested. This shows a high degree of interest to do more than just comply with regulations. It confirms the county's understanding that most businesses are trying to do the right thing.

After the technical assistance visit, businesses were notified whether they were in compliance with the Thurston County Sanitary Code – in other words, if they were handling and storing their hazardous materials in a way that did not threaten human health or the environment.

The majority of the inspected businesses were in full compliance with the Sanitary Code. They did this by having small quantities of materials stored indoors and in areas with no

floor drains or by having proper outdoor storage for these materials. The Business Pollution Prevention team generally offered very few suggestions to make management of hazardous materials better for these businesses.

## Marine Engine Testing

Oil and fuel-contaminated water present a unique problem for marine engine repair shops – outboard motors and jetskis. Marine engines typically use the body of water the craft is on for cooling. Also, the exhaust from these engines is usually discharged underwater. Marine repair shops need testing tanks or some other water source for testing engines.

The best system found used a testing tank where the water was pumped through a filtration unit and discharged back into the tank. This tank was in a service bay, all splash and spray was contained, and the service bay itself provided secondary containment for the system.

Several businesses used outdoor testing tanks. The splash and spray from the engine was not contained in some and resulted in contaminated water runoff. Two businesses had covered outdoor tanks to control the splash and spray, and also routed any runoff through an oil/water separator prior to disposal into the city storm water system.

Two businesses were required to modify their method of outdoor marine engine testing. These modifications eliminated the loss of coolant from splash and spray and retained the pollutants from the engines instead of releasing them to the environment.

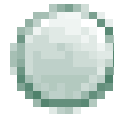
For more details on this campaign, call (360) 786-5457 and ask for a copy of the "Final Report for Small Engine Repair." ♦

## Requirements for Small Quantity Generators

The following guidelines are from Ecology's fact sheet, "Universal Waste Rule for Batteries and Mercury-Containing Thermostats, WAC 173-303-573."

- Label or mark wastes. For example, "Universal Waste - batteries" or "waste mercury thermostats."
- Limit accumulation to one year from the date first generated or received.
- Manage wastes to prevent releases to the environment.
- Immediately contain releases and handle residues appropriately. If residues are hazardous, manage them in accordance with all applicable requirements of the Dangerous Waste Regulations.

- Follow procedures for handling batteries and removing mercury-containing ampules from thermostats.
- Send or take Universal Waste to another handler who is acting as a collection center (with their prior agreement), a destination facility (TSD or recycler), or a foreign destination.
- Ensure that the receiving facility (collection center or destination facility) will accept the load before it is sent. If rejected, the original handler must accept the waste back, or both parties may agree on a new destination.
- Follow the export notification procedures for foreign destinations.
- Provide employee training. Employers must distribute basic handling and emergency information. ♦



## Universal Waste Recyclers

The following is a partial list of hazardous waste facilities that recycle Universal Wastes.

### Thurston County HazoHouse, Lacey

To register: 360-786-5457  
General info: 360-754-4348

### Ecolights Northwest, Seattle

206-343-1247

### Emerald Services, Seattle

206-786-4275

### Envirotech Systems, Inc., Lynnwood

800-922-9395

### Kleen Environmental Technologies, Seattle

206-285-8010

### Onyx Environmental Services, Tukwila

206-241-3900

### Philip Services, Renton

800-327-7759

### Safety Kleen, Auburn

800-248-0311

### Teris, Seattle

206-767-7990

### Van Waters and Rogers, Kent

800-562-4869



Thurston County  
Environmental Health  
2000 Lakeridge Dr. SW  
Olympia, WA 98502-6045

Return Service Requested

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