



# Shoptalk

A PUBLICATION FOR DANGEROUS WASTE MANAGERS

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## The Toxic Legacy of Mercury

Years ago, many businesses had difficult choices to make about mercury. This useful metal was known to be poisonous since the 1880s, but there were no satisfactory alternatives, and studies were inconclusive about how toxic it might be in small doses.

Mercury has been used in some switches, relays, batteries, fluorescent lamps, dental fillings, thermometers, and barometers. Burning coal also releases mercury. Most of these uses now have safer, viable alternatives. For example, older gas stoves had pilot ignitions with mercury; newer models use electronic ignitions. But the use of products that contain mercury continues, as does their toxic legacy.

Elemental mercury readily changes to methylmercury in the environment. Methylmercury is highly toxic, even in extremely low doses. It is invading our food supply, mostly through predatory fish. It can lead to problems with the heart, brain, and nervous system. In many places in Washington, some fish are unsafe to eat more than a few times a month, especially for young children and pregnant women. ([www.doh.wa.gov/ehp/oehas/fish/default.htm](http://www.doh.wa.gov/ehp/oehas/fish/default.htm))

One gram of mercury can poison a 20-acre lake to the degree that fish can be unsafe to eat. The amount of mercury in one float switch could poison a 1,100-acre lake, the size of American Lake near Tacoma or Loon Lake near Spokane.

The Washington State Department of Ecology (Ecology) is working with the Department of Health (DOH) to

virtually eliminate mercury use in Washington by 2015. Ecology and DOH need your help to make this a reality.

Methylmercury is a toxic substance that doesn't break down into non-toxic components, and actually concentrates as it moves up the food chain. Scientists call these chemicals Persistent, Bioaccumulative Toxins or PBTs. Washington has identified 22 chemicals of this type and is committed to reducing them drastically.

The Mercury Chemical Action Plan is the first plan in the PBT initiative. The 2003 Legislature approved the plan, which points out sources of human-caused mercury pollution and ways to reduce that pollution in Washington. You can read the plan at [www.ecy.wa.gov/biblio/0303001.html](http://www.ecy.wa.gov/biblio/0303001.html)

### Businesses are part of the solution

Auto recyclers, dentists, hospitals, heating, ventilation and cooling (HVAC) contractors and wholesalers, and others are working with Ecology and DOH to eliminate mercury from their practices and to properly dispose of the mercury that they have.

- Dentists agreed through the Washington Dental Association to install amalgam separators to keep mercury from fillings out of our water-treatment facilities.

- Auto recyclers are signing up for a voluntary program for removing mercury-containing switches from cars (see page 2).

- Hospitals are working to eliminate mercury-containing pressure gauges, thermometers, and other items.

- HVAC wholesalers and contractors are protecting the environment by collecting used mercury thermostats for proper disposal. Interested HVAC professionals should call 1-800-238-

8192 or go to [www.nema.org/gov/ehs/trc](http://www.nema.org/gov/ehs/trc) for information.

- Facility managers are learning about proper disposal of mercury-containing fluorescent and high intensity discharge lamps and are increasingly choosing to recycle them.

- Schools are complying with the January 2006 ban on mercury by removing mercury lab chemicals and other items.

- Retailers have removed banned mercury-containing products from their shelves.

- Independent small-scale dredge miners brought in more than 55 pounds of mercury used in historic mining operations.

Thanks to everyone working together, we are on our way to virtually eliminating the use and release of human-caused mercury in Washington and minimizing our exposure to mercury.



Gabe Baxter, of Spokane's Spalding Auto Parts, puts a switch with mercury into a special collection bucket. The Department of Ecology, Automotive Recyclers of Washington Association, and End-of-Life Vehicle Solutions are working together to prevent mercury pollution from vehicle recycling.

### Inside

Mercury Switch Program .....	2
Tier Two Reports Due .....	2
DW Annual Reports Due .....	3
Waste Codes Change .....	3
2007 DW Workshops .....	3

## Environment is a Priority as Washington's Auto Recyclers Begins Mercury Switch Removal Program

Auto recyclers (dismantlers and wrecking yards) in Washington crush and send 200,000 vehicles to a shredder each year. Many of those vehicles have switches using mercury, which need to be removed before processing to keep the toxic metal from entering the environment.

Under a new program initiated by the Department of Ecology, auto recyclers remove the switches for proper disposal before crushing and shredding the cars. In just the first few months of the program, recyclers removed more than 16,000 light switches containing a total of 36 pounds of mercury!

To start this effort, Ecology formed a partnership with the Automotive Recyclers of Washington Association (AROW) and End-of Life Vehicle Solutions (ELVS), an organization made up of automobile manufacturers who used mercury switches. The three parties signed a Memorandum of Understanding earlier this year.

Before 2003, most American-made vehicles used small pellets containing one gram of mercury in the hood and trunk light switches. More than 200 million of these switches were installed in vehicles from 1974-2002. Antilock brake systems used some mercury pellets, but more than 90 percent of the mercury in cars is found in the hood and trunk lights.

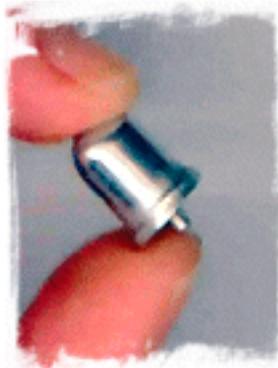
These lights work on mercury switches that ensure they light only when the hood or trunk is open. Mercury conducts electricity and is liquid at room temperature. The switches pose no real problems while in use, but the mercury escapes to the environment when vehicles are crushed, shredded, and melted down.

Now 150 licensed auto salvage yards, more than half such businesses in the state, are voluntarily collecting the switch assemblies as part of their routine breakdown of old cars. The participating firms process over 75 percent of Washington's salvage vehicles.

Each auto recycler receives an environmentally safe, 3.5-gallon container, labeled "Universal Waste." The recycler sends full containers to Environmental Quality in Michigan for proper disposal. ELVS pays for the container, transportation, and disposal of the mercury switches and Ecology pays the auto recycler \$3 for each mercury switch recycled.

The automobile is the most recycled product in the United States, with 10-12 million cars recycled each year. Mercury switches are no longer used in cars, but they will likely remain in the steel scrap supply for years.

For more information on the mercury switch removal program, call Jan Brydsen at (509) 575-2477, e-mail at [jbry461@ecy.wa.gov](mailto:jbry461@ecy.wa.gov). You can also visit [www.ecy.wa.gov/mercury/](http://www.ecy.wa.gov/mercury/) for more on the state's mercury programs.



*Auto switch using mercury*

## 2006 Tier Two Reports Due March 1

Businesses that store hazardous chemicals must report on that storage each year to the appropriate state and local governments. This requirement of Section 312 of the Emergency Planning and Community Right-to-Know Act (also known as SARA Title III) helps local governments plan for emergencies, forewarns emergency responders of chemical hazards, and keeps the public informed. Ecology's Community Right-to-Know Unit will be sending reminders to previous reporters in early January 2007. Reports for the calendar year 2006 are due March 1, 2007.

The reporting requirements apply to the maximum amount of a chemical on site at any one time during the previous calendar year. Many chemicals and hazardous substances, such as gasoline and diesel, are reportable if 10,000 pounds or more are on site at any one time. Some chemicals, such as chlorine and ammonia, are classified as Extremely Hazardous Substances (EHS) and are reportable at much lower thresholds – 100 pounds for chlorine and 500 pounds for ammonia.

Training on Emergency Planning and Community Right to Know (EPCRA) reporting is available from your Local Emergency Planning Committee (LEPC). You can find LEPC contact information on the Community Right-to-Know Web site, address shown below.

EPCRAMail, Washington's electronic Tier Two reporting system, is a convenient way to report. There are three versions to accommodate various software requirements. Businesses with multiple sites will be especially interested in this application. You can easily download EPCRAMail from the Community Right-to-Know Web site.

The Web site also has reporting requirements, forms, and instructional packets. For technical or regulatory assistance with EPCRA, call 1-800-633-7585 (press 2 at the greeting) or call (360) 407-6893. Web site address [www.ecy.wa.gov/epcra](http://www.ecy.wa.gov/epcra).

## Outstanding Recyclers Sought

The Washington State Recycling Association (WSRA) is seeking nominations for the 27th Annual Recycling Awards. The awards recognize Recycler of the Year for these categories:

- Individual
- Business Primary
- Business Generator
- Public Agency
- Institution
- Most Innovative Program

- Outstanding Public Education
  - K-12 Youth Education.
- Nominations are due March 1, 2007.

The awards will be presented May 8, 2007, at the WSRA 2007 Annual Banquet in Vancouver, Washington.

For more information, see the WSRA Web site at [www.wsra.net](http://www.wsra.net), call their offices at (206) 244-0322, or e-mail them at: [recycle@wsra.net](mailto:recycle@wsra.net).

## DW Annual Reports Due March 1

If your site had an active RCRA Site ID Number (i.e., generated reportable amounts of dangerous waste) during 2006, you need to file a 2006 Dangerous Waste Annual Report to Ecology by March 1, 2007. At the end of December, Ecology's annual reporting staff is sending reminders to sites with active numbers. To get started on your Annual Report, please go to <https://fortress.wa.gov/ecy/turbowaste/> and click on the orange "Enter TurboWaste" button.

Annual Reporting help is available at [www.ecy.wa.gov/programs/hwtr/waste-report/index.html](http://www.ecy.wa.gov/programs/hwtr/waste-report/index.html), or call 1-800-874-2022 (within Washington) or (360) 407-6170.

■ Questions about your 2006 generator status or dangerous waste identification? Call your local Ecology office and ask to talk to a hazardous waste or pollution prevention specialist. (See page 4 for Ecology office numbers.)

■ Questions about how your waste is managed or recycled after you ship it? Call your waste contractor.

There are no regulatory changes for the 2006 Annual Reports. An annual report staff person will be available to answer reporting questions at the Dangerous Waste Management Workshops (see article this page).

## Use TurboWaste.Net to Submit Annual Report

TurboWaste.Net is software that helps you complete Annual Dangerous Waste Reports and submit them to Ecology over the Internet. Last year, 92 percent of annual reporters filed their reports using TurboWaste.Net. Returning reporters can save time by copying their information from the year before. If you are one of the eight percent who has not yet tried it, or if you had "one-time only" waste shipments, please go to <https://fortress.wa.gov/ecy/turbowaste/> and click on the orange "Enter TurboWaste" button to get started. If you don't use a computer or you need to file a paper copy, please call us at 1-800-874-2022 (in Washington). We are glad to help you!

## Waste Designation Code Changes for 2007

You must include Hazardous or Dangerous Waste Designation Codes and Waste Management Codes on all Uniform Hazardous Waste Manifests in all states. These are new requirements from the Environmental Protection Agency and the U.S. Department of Transportation. (See *Shoptalk*, Autumn 2006; [www.ecy.wa.gov/biblio/0604003.html](http://www.ecy.wa.gov/biblio/0604003.html))

### Lab Pack Code Changes

Washington State only Lab Pack codes WL01 and WL02 are not actual waste designation codes. They cannot be used on manifests after September 2006, and they cannot be used on Annual Reports starting with the 2007 Reporting Year. If your facility used Lab Pack codes, you may need to update your on-site waste tracking system.

Continue to use the Federal or State waste designation codes that apply to your wastes on both your manifests and your annual reports. If you have questions please call these contacts:

■ State Waste Codes – call Tom Cusack, in Ecology's Headquarters, at (360) 407-6755, e-mail [tcus461@ecy.wa.gov](mailto:tcus461@ecy.wa.gov), or your Ecology inspector.

■ Completing the new manifest form – call Bryan Groce, in EPA's Office of Solid Waste, (703) 308-8750, e-mail [groce.bryan@epa.gov](mailto:groce.bryan@epa.gov), or Richard LaShier, (703) 308-8796, e-mail: [lashier.rich@epa.gov](mailto:lashier.rich@epa.gov).

■ Annual Reporting and Lab Packs – call Kathleen Kaynor, in Ecology's Headquarters, at (360) 407-6735, or e-mail at [TurboWaste@ecy.wa.gov](mailto:TurboWaste@ecy.wa.gov)

### Management Code Changes

The Washington State-only Waste Management code H142 for extended storage also cannot be used on waste manifests after September 2006. Ecology is continuing to allow the H142 Management Code on Annual Reports. Wastes reported with a H142 Code will be considered a "state-only" management action, which EPA does not recognize, and will not be sent to EPA with other state waste data. If you have questions please call Kathleen Kaynor at (360) 407-6735 or e-mail [TurboWaste@ecy.wa.gov](mailto:TurboWaste@ecy.wa.gov)

## 2007 DW Workshops Scheduled

Is your business' waste flammable? Should you leave an open funnel in your used oil collection barrel? How long can you legally store dangerous waste at your facility?

Ecology's Dangerous Waste Management workshops can help you find the answers to these and other questions in an informal, casual atmosphere. The daylong workshops teach the basics of properly handling, storing, and disposing of dangerous wastes, as well as tips on how pollution prevention can boost your profits. Cost is \$55 per person with lunch provided.

For on-line registration, go to: [www.ecy.wa.gov/programs/hwtr/workshops/dwmw/index.html](http://www.ecy.wa.gov/programs/hwtr/workshops/dwmw/index.html). The link to the registration form is at the bottom of the page. To register by phone, call Lori Gonzalez, at (360) 407-7118, e-mail at: [lgon461@ecy.wa.gov](mailto:lgon461@ecy.wa.gov). For more information about the workshop content, call Mariann Cook Andrews, at (360) 407-6740, e-mail at: [maco461@ecy.wa.gov](mailto:maco461@ecy.wa.gov)

### 2007 Workshops

#### January 30, 2007

Quality Inn and Conference Center  
221 NE Chkalov Drive  
Vancouver (new location)

#### February 1, 2

Shoreline Conference Center  
18560 First Avenue NE  
Shoreline

#### February 13

Mirabeau Park Hotel  
1100 North Sullivan Road  
Spokane Valley

#### February 15

Clarion Hotel and Conference Center  
1507 N First Street  
Yakima

#### February 21, 22, 23

La Quinta Inn & Suites  
1425 East 27th Street  
Tacoma

**Q I heard there is a new rule for computer monitors with Cathode Ray Tubes (CRTs). Should I change how I manage my CRTs and other electronic waste?**

**A** Ecology may adopt EPA's new CRT rule into the *Dangerous Waste Regulations* next year. For now, follow Ecology's Enforcement Policy (# 02-04-017; [www.ecy.wa.gov/biblio/0204017.html](http://www.ecy.wa.gov/biblio/0204017.html)) for managing all electronic waste you recycle.

Ecology will change its policy in January to reflect some of the new requirements. To hear about any changes, subscribe to Ecology's FREE list serve at <http://listserv.wa.gov/archives/dw-rules.html>

**Q What do I need to know about exporting CRTs?**

**A** If you are exporting CRTs for reuse, you must notify EPA beginning January 29, 2007. Ecology will revise its enforcement

policy later this year to include the new EPA export requirements for both reuse and recycling. If you are exporting CRTs for recycling (glass recycling or smelting), you will need to begin following EPA's new notification and consent requirements beginning January 2007.

If you would like more information, see the *Federal Register* Vol. 71, No. 145, Friday, July 28, 2006 at [www.epa.gov/epaoswer/hazwaste/recycle/electron/crt.htm](http://www.epa.gov/epaoswer/hazwaste/recycle/electron/crt.htm)



**Department of Ecology**

Your business is liable for all dangerous wastes generated. If you are uncertain about your responsibilities as a dangerous waste generator, call your nearest Ecology office and ask for a hazardous waste specialist. For information on reducing or recycling dangerous waste, ask for the toxics reduction staff, at:

- Bellevue: (425) 649-7000
- Lacey: (360) 407-6300
- Yakima: (509) 575-2490
- Spokane: (509) 329-3400

If you need this information in an alternate format, please call the Hazardous Waste and Toxics Reduction Program at (360) 407-6700. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call (877) 833-6341.

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