

Mercury-Containing Equipment

Environmental concerns with mercury-containing equipment

Mercury-containing equipment, such as thermostats, thermometers, mercury switches, manometers, barometers, flow meters, regulators and pressure relief valves, can contain levels of mercury that make them hazardous waste when disposed. Mercury is a toxic metal that can accumulate in living tissue and cause adverse health effects.

Every year, Oregonians throw away thousands of mercury-containing devices in the garbage, making mercury-containing equipment one of the largest sources of mercury in our landfills. When a mercury ampule is broken or placed in a landfill or incinerator, mercury may be released into the environment. This may endanger people handling the broken equipment or contaminate the air, ground surface or groundwater.

Household thermostats, thermometers and other mercury-containing equipment

Homeowners replacing their own mercury thermostats and other mercury-containing devices are encouraged to dispose of such wastes at a household hazardous waste collection facility or hazardous waste collection event.

For additional information on management of mercury-containing household products, please check the DEQ Web page at www.deq.state.or.us/lq/sw/hhw/thermostats.htm

For information on household hazardous waste collection opportunities please call (503) 234-3000 in the Portland metro area or toll-free at 1-800-732-9253 from other parts of the state.

Recycling waste mercury thermostats

For most businesses, governments and institutions, the best way to manage mercury thermostat waste is to recycle the thermostats using the Thermostat Recycling Corporation (TRC) collection program. Sponsored by thermostat manufacturers, the TRC program promotes the collection of mercury-containing thermostats for no charge at participating thermostat wholesalers. Only whole thermostats are collected by this program. For information on the TRC and the facilities collecting thermostats, please go to the TRC web site:

<http://www.nema.org/gov/ehs/trc/>

Recycling other waste mercury-containing equipment

Waste mercury-containing devices produced by non-households are classified as "universal waste" in Oregon. Managing universal waste is simpler than managing waste as hazardous waste and encourages the collection and recycling of these wastes. Proper universal waste management requires managing the waste in a manner that does not release mercury into the environment.

Universal waste mercury-containing equipment has special management requirements that include storage time limits and labeling and container requirements.

- **Labeling and marking**
Containers holding universal waste mercury-containing equipment or mercury ampules removed from the equipment must be labeled or marked clearly with one of the following phrases: "Universal Waste – Mercury-Containing Equipment," "Waste Mercury-Containing Equipment" or "Used Mercury-Containing Equipment."
- **Accumulation time**
Handlers generating universal waste, including universal waste mercury-containing equipment, may not accumulate universal waste for longer than one year. Handlers who receive universal waste from off-site, called "off-site collection sites," may only accumulate for six months. DEQ will grant an extension if the handler can demonstrate to DEQ that additional time is needed to facilitate proper recovery, treatment or disposal of the waste. All handlers must respect the accumulation time limits. Usually, this can be done by placing the date on the container holding the mercury-containing equipment or devices when accumulation starts.
- **Compatible containers**
Mercury-containing equipment should be collected in well-sealed, leak-proof, heavy plastic containers in an area where there is little risk of fire or breakage. Do not use tin or aluminum containers because mercury may combine with these metals and may leak through seams. Do not dispose of mercury-containing equipment with regular solid waste.



State of Oregon
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Mercury-containing equipment not covered by this guidance

- Equipment that is not a waste under the Code of Federal Regulations (Title 40 CFR Part 261)
- Mercury-containing equipment that is not a hazardous waste
- Equipment and devices from which the mercury has been recovered

Proper disposal of waste mercury-containing equipment

Waste mercury-containing equipment should be managed in a manner that ensures that mercury does not enter the environment. Proper disposal of these devices includes recycling to recover the mercury for reuse. Proper management does not include disposal at a solid waste landfill or incinerator, breaking of the ampule containing the mercury, or burning. Unused mercury-containing equipment becomes a waste when the handler decides to discard it.

Other waste management options

Businesses that wish not to recycle their mercury-containing equipment under the Universal Waste Rule recycling program may instead choose to manage waste mercury-containing equipment as hazardous waste, using other waste management services. For a list of universal waste contractors, please check the Web page at:
www.deq.state.or.us/lq/hw/uwcollectors.htm

For more information

Complete universal waste management regulations can be found in 40 CFR 273 and Oregon Administrative Rule (OAR) Chapter 340, Division 113.

For further information on the management of universal waste, please go to DEQ's universal waste Web page at:
www.deq.state.or.us/lq/hw/uw.htm

The following universal waste materials are available from DEQ at the link above:

- *Universal Waste Handler fact sheet*
- *Universal Waste Battery fact sheet*
- *Waste Pesticide fact sheet*
- *Waste Lamps and Ballasts fact sheet*
- *Universal Waste Activity Form*

Visit the DEQ Web page for additional information on mercury at:

www.deq.state.or.us/lq/mercury.htm

For additional universal waste and hazardous waste technical assistance, contact the DEQ regional office nearest you:

Bend: (541) 388-6146

Eugene: (541) 686-7838

Gresham: (503) 667-8414

Pendleton: (541) 276-4063

Portland: (503) 229-5263

Salem: (503) 378-8240

Alternative formats

Alternative formats (Braille, large type, etc.) of this document can be made available. Contact the DEQ Office of Communications and Outreach, Portland, for more information at (503) 229-5696, or call toll-free within Oregon at 1-800-452-4011.