

PROPER HANDLING OF MERCURY-CONTAINING PRODUCTS

Reducing Mercury Pollution



The Clean Water Program's friendly and knowledgeable staff support companies like yours in preventing water pollution. The fact that you're reading this fact sheet probably means you have already decided to take steps to do the right thing with broken, spent or unwanted mercury-containing items. Thank you for helping to keep our water safe and healthy.

Which products contain mercury?

The proper disposal of mercury as described in the *Universal Waste Rule* is vital to keeping this toxic material out of the water supply. Most of the products listed below are subject to the Rule:

- **Lamps** — Fluorescent lamps (straight, U-shaped, compact, others), High Intensity Discharge Lamps; and Mercury Vapor, Metal Halide, High Pressure Sodium and Neon Signs.
- **Thermometers, Thermostats, Dental Amalgams, Mercury Batteries, Novelties, and Rubber Flooring** in some older gymnasiums
- **Switches and Relays** — used in automobiles to turn on car hood or trunk lights, anti-lock brakes and airbags; used to activate alarms, motion sensing lights, sump and bilge pumps; and used to stop clothes washers' spin cycle.
- **Pressure or Vacuum Gauges** — Manometers, Barometers, Sphygmomanometers. Primarily used for medical and scientific purposes.
- **Gas Flow Regulators, Thermostat Probes, Flame Sensors, Gas Safety Valves** used to stop or open flow of gas to water heaters, ovens, space heaters and other appliances.
- **Dilators and Weighted Tubing** — Bougie tubes, Canter tubes used in medical procedures.
- **Counterweights and Dampers** — Bow stabilizers for archery, recoil suppressors for shotguns and counterweights for clocks.

It is important to prevent mercury from entering our water supplies by recycling mercury waste, using non- or low-mercury alternatives and controlling potential releases of mercury through good business practices.

Mercury enters the environment through landfill leaching, wastewater treatment facilities or as atmospheric deposition. As atmospheric deposition, mercury mixes with rain and then falls into the Bay and other waterways. According to State water quality officials, Bay Area residents and businesses dispose of approximately 13 million fluorescent lamps in landfills each year and cause the release of an estimated 10 to 130 kilograms per year of mercury vapor into the atmosphere of the San Francisco Bay region from crushed and broken lamps.

Learn more about preventing water pollution and the Clean Water Program at www.cleanwaterprogram.org.



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Choose Low-Mercury Fluorescent Lamps

DO use low-mercury alternatives with up to 80 percent less mercury than standard fluorescent lamps. Philips' "Alto," General Electric's "Ecolux," and Sylvania's "Ecologic" are examples of low-mercury fluorescents.

Best Management Practices for Mercury Lamp Storage

- Store used lamps in impact-resistant containers designed to prevent breakage, or place containers in sturdy double containers and store in a dry place. Two sources of containers are the manufacturer's box and mercury recycling companies. Packing material around the lamps is not required.
- Label or mark containers "Universal Waste — Lamps" or "Waste Lamps" or "Used Lamps". Individual recycling companies may want the word mercury included.
- Containers with used lamps should show no evidence of leakage. Lamps showing evidence of damage must be placed in a plastic bag and then placed in the container.
- Waste lamps should not be kept for over a year, or they may be subject to additional regulatory oversight and paperwork.

Spill Cleanup

- If lamps break, clean up immediately, store broken lamp pieces as well as any spilled powder in a sealed plastic bag, then place in a sealed drum or other closed, structurally sound container. Recycle/dispose of according to the *Universal Waste Rule* (see right).

Shipping/Documentation

(for waste sent to certified recyclers)

- Keep invoices, bills of lading, logs or other shipping records for three years. Record should indicate shipping date, name/address of shipping origination or destination and number of lamps.
- Waste can be shipped to the appropriate recycling location using a common carrier. A bill of lading is required to transport lamp waste to a recycling center, but a Uniform Hazardous Waste Manifest is not required and other Hazardous Waste requirements do not apply.



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Simple changes to your operations and maintenance can help you comply with local regulations. The Clean Water Program makes it easy.

Learn more about preventing water pollution and the Clean Water Program at www.cleanwaterprogram.org.

How to Recycle

- Recycle at an authorized facility. See list of businesses below. OR
- If your business generates only small quantities, Alameda County Household & Small Business Hazardous Waste Program (www.acgov.org/aceh/household) accepts mercury lamps for a small fee. Call (800) 606-6606 for details and to make an appointment for disposal.

Authorized Recycling Facilities

AERC Recycling Solutions

Hayward, California
(510) 429-1129
www.aercrecycling.com

Lighting Resources Inc.

Ontario, CA
(888) 923-7252
www.lightingresourcesinc.com

For More Help

The Association of Lighting and Mercury Recycler's home page has information about recycling lamps and lists the nation's fluorescent tube recyclers: www.almr.org

California Department of Toxic Substances Control provides detailed information on how to dispose of mercury-containing and other universal waste: www.dtsc.ca.gov/HazardousWaste/UniversalWaste

KEY DEFINITIONS

Universal Waste Rule

Universal wastes include products with mercury and other widely used hazardous substances that have a more significant detrimental impact on the environment than typical waste materials, but are not as dangerous and risky to handle as hazardous wastes. The Universal Waste Rule (CA Code of Regulations, Title 22, Division 4.5, Chapter 23) refers to the special requirements for handling, transporting and disposing of these wastes.