

Storm Drain Pollution from Mercury Thermostats and Fluorescent Lamps

Mercury is a silver-colored heavy metal that is liquid at room temperature. It is toxic to humans and animals if inhaled, absorbed through the skin, or ingested in very small amounts. Mercury from demolition sources that gets washed into the Bay contributes to unsafe levels of mercury found in fish. Disposing of mercury-containing thermostats and fluorescent lamps as regular trash also causes serious problems and is illegal. You can help prevent releases of mercury to the Bay and ocean and comply with state law by recycling all mercury-containing thermostats and fluorescent and high-intensity discharge (HID) lamps.

Mercury-Containing Thermostats

Each of these switches contains about 2 to 4 grams of mercury. It is common to find thermostats with one, two or four vials of mercury. Mercury-containing thermostats are banned from regular trash disposal in California because they contain mercury.

Fluorescent Lamps

Fluorescent lamps and high-intensity discharge (HID) lamps, including mercury vapor, high-pressure sodium, and metal halide lamps are banned from regular trash disposal in California because they contain mercury.

In addition, ballasts from fluorescent lamps are assumed to contain polychlorinated biphenyls (PCBs) unless they are marked or tested to show they do not contain PCBs. Ballasts that contain PCBs must also be disposed of as hazardous waste.

If a municipality is involved with mercury related clean-up, the responsible party shall be liable for the full clean-up costs. Since fluorescent lamps and mercury-containing thermostats are hazardous wastes, it is unlawful to dispose of these items with regular trash, and anyone doing so would be violating hazardous waste disposal laws.

General Business Practices - Thermostats

Identification

Most thermostats have a removable front plate. This plate should be removed to determine whether or not the thermostat contains mercury.

Removal

- ❑ To remove a mercury-containing thermostat, it is necessary to remove the whole thermostat.
- ❑ A screwdriver and wire cutters should be used to remove the thermostat without damaging it.
- ❑ Average time for removal is 60 seconds.
- ❑ If vials of mercury are removed from the thermostat, instead of removing the whole unit (not recommended), these vials should be placed in plastic sealable bags prior to placing them in an airtight container.

General Business Practices – Fluorescents

Identification

Fluorescent lamps can be found in various overhead light fixtures and exit signs. They come in many shapes and sizes. **ALL FLUORESCENT LAMPS CONTAIN MERCURY.**

Storage and Disposal

- ❑ Fluorescent lamps are very delicate. Applying excess force to the lamp may result in injury.
- ❑ Lamps should be stored in appropriate containers to prevent breakage.
- ❑ Some mercury recyclers rent or provide cylindrical cardboard boxes for safe transportation of fluorescent lamps.
- ❑ A 15-inch diameter drum for eight-foot lamps holds between 80-90 fluorescent lamps, while a 21-inch diameter drum for four-foot lamps holds between 160-170 lamps.

Proper Disposal

Arrange recycling with a mercury recycler or call the Very Small Quantity Generator Program (VSQG) to see if you qualify. **The California Code of Regulations, Title 22, requires that you recycle fluorescents and other mercury-containing lamps, switches, and thermometers.**

Very Small Quantity Generator Program

Drop off program for businesses in San Mateo County that generate small quantities of hazardous waste. Use San Mateo County Health Services Agency's Household Hazardous Waste Hotline (650) 363-4718 and/or www.smhealth.org/hhw

Commercial Mercury Recycler Services

Fluorescent and other mercury-containing lamps and mercury-containing devices, such as thermometers, thermostats, switches, and relays. Company names are provided for information purposes, and they are not endorsed by STOPPP.

AERC Recycling Solutions
30677 Huntwood Ave, Hayward
(800) 628-3675; (510) 429-1129

Lighting Resources, Inc.
805 East Francis St.
Ontario, CA 91761
(888) 923-7252

In Case of a Mercury Spill

- ❑ Never vacuum, use a paintbrush, broom or household cleaning products to clean up the spill.
- ❑ Never pour or allow mercury to go down a drain.
- ❑ Use a mercury spill-kit if one is available.
- ❑ Dam the mercury (using rags or other disposable items) to prevent spreading.
- ❑ Gather the mercury beads with a piece of thin cardboard by pushing beads together into a plastic dustpan.
- ❑ Keep persons who are not involved in the cleanup away from the spill area to limit exposures and prevent the spread of contamination.
- ❑ Immediately ventilate the area.
- ❑ Store clean-up debris in a heavy plastic bag inside a box or in a rigid plastic container that can be sealed.
- ❑ Place a label on the container indicating broken lamps or vials are inside, so that the recycler can handle them appropriately. Do not mix glass debris with unbroken spent lamps or thermostats when they are recycled.
- ❑ Put contaminated clothing/shoes into a trash bag and wipe any visible mercury beads into a bag.

This brochure is one of a series of pamphlets describing storm drain protection measures for specific types of construction industry activities. Other pamphlets include:

General Construction and Site Supervision

Landscaping, Gardening, and Pool Maintenance

Painting and Application of Solvents and Adhesives

Roadwork and Paving

Earth-Moving Activities

Heavy Equipment Operation

Dewatering Activities

New Stormwater Control Requirements

For more information about the countywide storm drain protection program, and additional brochures, call:



San Mateo Countywide Stormwater Pollution Prevention Program (STOPPPP)
555 County Center, Fifth Floor
Redwood City, CA 94063
(650) 363-4305

www.flowstobay.org

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For more information-

Non-emergency calls:

1. San Mateo County Environmental Health Division's Household Hazardous Waste Hotline includes information for businesses who qualify under the Very Small Quantity Generator Program: (650) 363-4718
2. Local stormwater programs (see list below) can provide stormwater pollution prevention information and additional brochures:

Town of Atherton	(650) 752-0541
City of Belmont	(650) 595-7427
City of Brisbane	(415) 508-2130
City of Burlingame	(650) 558-7230
Town of Colma	(650) 757-8888
City of Daly City	(650) 991-8200
City of East Palo Alto	(650) 853-3189
City of Foster City	(650) 286-3270
City of Half Moon Bay	(650) 726-8260
Town of Hillsborough	(650) 375-7411
City of Menlo Park	(650) 330-6740
City of Millbrae	(650) 259-2339
City of Pacifica	(650) 738-3767
Town of Portola Valley	(650) 851-1700
City of Redwood City	(650) 780-7464
City of San Bruno	(650) 616-7160
City of San Carlos	(650) 802-4361
City of San Mateo	(650) 522-7340
City of South San Francisco	(650) 877-8634
Town of Woodside	(650) 851-6790
County of San Mateo	(650) 363-4708

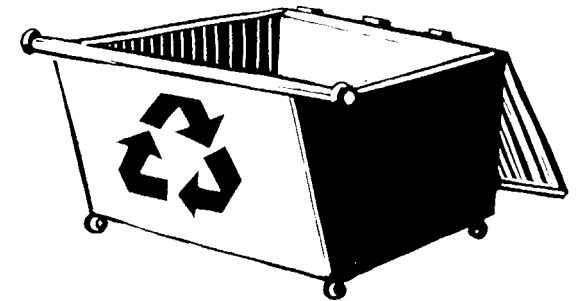
Also contact www.flowstobay.org

3. **San Francisco Bay Regional Water Quality Control Board:**
510) 622-2300

Emergency calls only:

1. Dial 911
2. Governor's Office of Emergency Services
Warning Center (24 hours): 1-800-852-7550

Building Demolition and Mercury Hazards



Best Management Practices for the Construction Industry



San Mateo Countywide Stormwater Pollution Prevention Program (STOPPPP)
www.flowstobay.org