

Establishing Hazardous and Universal Waste Collection Areas

A hazardous waste is generally defined as a toxic, corrosive, reactive or ignitable substance. Most hazardous wastes from schools are generated in science laboratories, shops, art rooms, photography studios and maintenance operations. Hazardous wastes found in schools could include solvents, alcohols, paint thinners, solvent-based paints and stains, acids, bases, photographic chemicals, toxic metals and automotive fluids. Any school that produces hazardous waste as part of its operations must register with the Massachusetts Department of Environmental Protection (DEP) as a generator of hazardous waste. Registration forms can be obtained by contacting DEP at 800-462-0444.

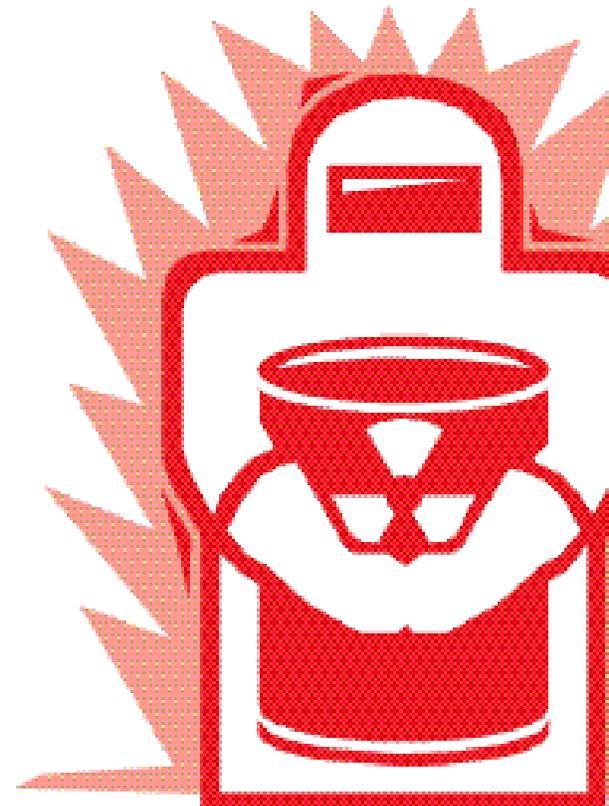
Generators of hazardous waste are classified by the amount of waste they generate; the requirements vary based on this status, as indicated below. The amount of hazardous waste generated is the total of all hazardous waste per address, excluding waste oil, which is counted separately.

- A Very Small Quantity Generator (VSQG) generates less than 27 gallons per month of hazardous waste. Most schools fall into this category.
- A Small Quantity Generator (SQG) generates between 27 and 270 gallons per month of hazardous waste.
- A Large Quantity Generator (LQG) generates more than 270 gallons per month of hazardous waste.

Hazardous Wastes and Universal Wastes

Discarded mercury-containing devices are considered hazardous waste but may be managed as universal waste. Universal wastes are subject to streamlined requirements. The following sections discuss universal and hazardous waste storage and disposal specifically for mercury materials.

Most hazardous wastes from schools are generated in science laboratories, shops, art rooms, photography studios and maintenance operations.



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Setting up a Hazardous Waste Storage Area

The following mercury materials commonly found in schools are classified as hazardous wastes (not universal wastes) once you decide to dispose of them:

- elemental mercury
- mercury compounds
- spill clean up materials contaminated with mercury

Hazardous wastes must be stored in a segregated and secure area with markings to delineate the area (such as black and yellow marking tape) and a sign “Hazardous Waste Accumulation Area” in letters at least one inch high. Wastes must be stored in appropriate containers.

All hazardous wastes must be labeled with the following information:

1. The words “hazardous waste.”
2. The identity of the waste (e.g., waste mercuric oxide)
3. The hazard associated with the waste (e.g., toxicity, corrosivity, ignitibility, reactivity)
4. The date you began accumulating the waste

If you are a VSQG, you do not have a specific time limit for accumulation of your hazardous wastes. However, you must dispose of your hazardous wastes when you have accumulated 165 gallons of waste. Hazardous waste must be shipped off-site by an authorized hazardous waste transporter, or you can self-transport up to 55 gallons of hazardous waste to an authorized generator or hazardous waste contractor who agrees to accept it.

Storage and transport of hazardous waste may be subject to additional recordkeeping and other management requirements, beyond those required for universal wastes.

For more information, contact the Massachusetts DEP at (617) 292-5898.

In addition, on-site technical assistance is available through the Massachusetts Executive Office of Environmental Affairs’ Office of Technical Assistance (OTA). At no charge, OTA staff will conduct a confidential walk-through of a school and provide detailed guidance on proper management of mercury and other hazardous materials and wastes, risk reduction, employee training and opportunities for reducing or eliminating environmental concerns and liabilities. A person may contact OTA at 617-626-1060 to request a visit or ask specific questions. Assistance may also be available through local recycling programs, boards of health and special programs being implemented by the Massachusetts DEP, EOE and municipal solid waste combustors. For more information on special programs, contact Judy Shope of the Massachusetts DEP.





Setting up a Universal Waste Storage Area

The following mercury-containing devices commonly found in schools can be managed as universal wastes once you decide to dispose of them:

- mercury fever and laboratory thermometers
- mercury thermostats
- mercury switches
- mercury relays
- mercury gauges: manometers, barometers, vacuum
- mercury thermostat probes
- fluorescent lamps
- mercury vapor lamps
- metal halide lamps
- high pressure sodium lamps

Universal wastes must be stored in a secure area. Wastes should be in double containment (e.g., inside a plastic bag which is inside a plastic container with a tight-fitting lid). Universal Wastes must be labeled “Universal Waste - Name of Waste - Date storage began.” Universal wastes can be stored for up to one year.

Universal waste handlers are divided into two categories depending on the amount of universal waste stored:

- Small Quantity Handler - less than 5,000 kg of universal waste on site at any one time. No notification or recordkeeping is required. Most schools fall into this category.
- Large Quantity Handler - 5,000 kg or more total of universal waste on site at any one time. Notification and recordkeeping are required.

Disposing of Waste

All schools must set up a program for the proper disposal of hazardous and universal wastes. It is illegal and unsafe to dispose of these wastes in the regular trash or down the drain. Following are three possible options for disposing of these wastes.

1. Many schools have made arrangements with their communities to dispose of hazardous and/or universal waste during the city or town’s household hazardous products collection event. This arrangement can result in a lower cost to the school because the school saves on transportation and labor costs. A VSQG (generating less than 27 gallons per month) can legally transport hazardous wastes to another hazardous waste generator (such as the town department implementing the household hazardous products collection) for disposal by a licensed hazardous waste contractor. The person transporting the waste should be trained in chemical safety and emergency response.

2. Alternately, some schools coordinate hazardous and/or universal waste disposal with another municipal department, possibly saving money on transportation and labor costs.

3. A third option is hiring a hazardous waste contractor. As municipal entities, schools may take advantage of state purchasing contracts with certain vendors that provide waste handling services at a negotiated rate. In order to get the state contract pricing, you must ask for it in your initial contact with the contractors. Reference contract #ST9J213A.

For information on these state contracts, see the Massachusetts Operational Services Division (OSD) publication “Recycled and Environmentally Preferable Products and Services.” Visit www.mass.gov/osd/enviro/material.htm, or contact Marcia Deegler at 617-720-3356 or Marcia.Deegler@osd.state.ma.us.

Working with Contractors

In 2001, the Massachusetts state contractor for recycling mercury from mercury devices is:

Superior Special Services
218 Canton Street
Stoughton, MA 02072
ph: (781) 341-6080).

Superior will pick up and recycle the mercury from the following items:

- Mercury fever and laboratory thermometers
- Mercury thermostats
- Mercury switches
- Mercury relays
- Mercury gauges: manometers, barometers, vacuum
- Elemental mercury
- Mercury thermostat probes
- Fluorescent lamps
- Mercury vapor lamps
- Metal halide lamps
- High pressure sodium lamps

In June 2001, the price for recycling of mercury devices and elemental mercury was \$4.75/pound and fluorescent lights cost 9.5 cents per foot for less than 7500 feet. Containers for storing the mercury devices, pick up and recycling are included in the price. To obtain the state contract pricing, contact Superior (2001 contact Amanda Poverchuk 781-341-6080 x213) and reference state contract #ST7J211. Check the "Recycled and Environmentally Preferable Products and Services" Guide for updated contract information (under Fluorescent Lamps).

Alternately, some of the mercury materials listed above and other mercury chemicals (e.g., mercuric oxide) may be disposed of along with other hazardous wastes using a hazardous waste contractor. The following two companies are currently on the state contract for hazardous waste collection:

Clean Harbors
2001 contact Dave Batagowski
800-282-0058x337

Triumvirate
2001 contact Leah Ross
800-966-9282 x225 or 617-628-8090

Other hazardous waste contractors are also available and obtaining quotes from a few vendors is recommended.

