



## HOUSEHOLD MERCURY— APPROPRIATE USE AND DISPOSAL PRACTICES



Mercury is a versatile, natural element and has traditionally been used in many products, processing operations, and applications. If handled properly, mercury can be both beneficial and safe. However, if handled improperly even small amounts can be harmful to humans and wildlife.

### Mercury Containing Devices (MCDs)

typically include older thermometers, thermostats, switches, and some high intensity discharge lights which contain elemental mercury as well as mercury vapor; and many are used every day in homes, schools and businesses. Mercury emits vapor contaminating the air which eventually settles into surface water and groundwater where microorganisms can change it into methylmercury, a highly toxic form of mercury.



Methylmercury builds up in fish, shellfish and animals that eat fish and is the main source of exposure to humans. Fish advisories, the state, EPA, and FDA work to advise women who may become pregnant, who are pregnant, nursing mothers and parents of young children how often they should eat certain types of commercially-caught fish and shellfish. Methylmercury's effects on animals and birds that eat highly-exposed fish include death, reduced reproduction, slower growth and development, as well as abnormal behavior. High levels in the bloodstream of unborn babies and young children may harm their developing nervous systems, making the child less able to think and learn. Fortunately, research shows that most people's fish consumption should not cause a health concern, but when mercury or MCDs are mishandled the risks increase.

As MCDs become antiquated and costly to maintain they are being replaced more frequently; therefore, it is important they be handled and disposed of appropriately. Because high levels of exposure to mercury can affect the brain, heart, kidneys, lungs, and immune system of people of all ages, MCD disposal is regulated by state and federal laws. Other guidelines and information can be found at <https://deq.nc.gov/conservation/recycling/fluorescent-lights>.

**Proper Management of Mercury Thermostats** — Mercury thermostats are regulated as universal waste and are the responsibility of the generator at the time the device is considered a waste material. Visit [www.epa.gov/mercury/mercury-consumer-products#disposal](http://www.epa.gov/mercury/mercury-consumer-products#disposal) for more on this and other common devices containing mercury. For the closest recycling location for thermostats go to [www.thermostat-recycle.org/zipsearch](http://www.thermostat-recycle.org/zipsearch).

### Lights Containing Mercury (LCM)

includes fluorescent bulbs, compact fluorescent light bulbs (CFLs), high intensity discharge (HID) lamps, ultraviolet lamps, and neon lights. These should also be handled, recycled, and disposed of properly.



Vapor from broken or discarded lights like these can affect the environment and possibly contaminate air quickly; therefore, if a bulb containing mercury is broken in a confined area, extra steps should be taken to evacuate the area and avoid breathing and spreading the vapor. Special clean-up procedures should also be taken for any mercury and vapor release. See contacts and details below.

North Carolina residents are strongly encouraged to recycle spent fluorescent lights from their home. Helpful information can be found at [www.recyclenc.org](http://www.recyclenc.org). Some retail stores offer free recycling and several mail-back programs. For information on available programs and locations visit <https://www.epa.gov/mercury/mercury-consumer-products>.

**Local Options for Disposal/Recycling of Devices Containing Mercury** - Rowan County Recycling has special waste collection events which includes accepting thermometers, thermostats, and fluorescent bulbs. For questions regarding the next collections event call 704-216-8606.

**IMPORTANT - Mercury Release, Spills, or Breakage of a Device Containing Mercury** – Immediate action is required and proper clean-up is determined by the amount of mercury released, where it was released, and who was exposed. Details can be found at [www.epa.gov/mercury](http://www.epa.gov/mercury) or from your local poison control center. The Carolinas Poison Center can be reached at 1-800-222-1222 or 704-355-4000. For spills of more than the amount of a thermometer, but less than or similar to two tablespoons, the EPA recommends contacting your local health department; and if it is after hours, call your local fire department without delay. When spills involve more than two tablespoons of mercury, it is mandatory to call the National Response Center (NRC) at (800) 424-8802 immediately. If there was exposure for any length of time to an area where cleanup did not occur or to larger amounts of mercury contact the Carolinas Poison Center for more information.

More detailed information can be obtained from Joseph Fitzpatrick, Environmental Specialist, Recycling and Materials Management Section, Division of Environmental Assistance and Customer Service (DEACS) at the N.C. Dept. of Environmental Quality at 919-707-8121. Email: [joseph.fitzpatrick@ncdenr.gov](mailto:joseph.fitzpatrick@ncdenr.gov). Additional information is also available at [www.recyclenc.org](http://www.recyclenc.org).