

## City of Clinton Wastewater Treatment Plant Mercury Reduction Information

### Introduction

Mercury is a naturally occurring element that is found in air, water and soil. It exists in several forms: elemental or metallic mercury, inorganic mercury compounds, and organic mercury compounds. Mercury is an element in the earth's crust. Humans cannot create or destroy mercury. Pure mercury is a liquid metal, sometimes referred to as quicksilver, that volatilizes readily. It has traditionally been used to make products like thermometers, switches, and some light bulbs.



### Total Maximum Daily Load for Mercury

The North Carolina Department of Environmental Quality, Division of Water Resources has issued a statewide total maximum daily load (TMDL) for mercury. A TMDL is the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards. The ultimate goal of the TMDL is to ensure safe levels of mercury in fish throughout North Carolina for human consumption. The City of Clinton has developed a Mercury Minimization Plan that evaluates the potential for non-domestic (industrial/commercial) users of the sewer system to discharge mercury into the collection system. The City has surveyed and evaluated common sources of mercury in an effort to reduce the chances of mercury being discharged to the environment.

### The Impact of Mercury on Your Health and the Environment

Atmospheric mercury comes from both natural and man-made sources. Some of these are: volcanoes, natural mercury deposits, coal combustion, waste incineration and metal processing. Once airborne, mercury can fall in raindrops or through dust and be deposited in lakes and streams. The bacteria in these water bodies then can transform the mercury to methylmercury. The methylmercury then travels up the food chain from the bacteria to the fish to humans. This form of mercury is toxic to the fish and people.

Methylmercury is a neurotoxin that affects your brain as well as many other organs/systems in your body. Unborn and young children that are exposed to methylmercury may incur damage to their brain development, cognitive thinking, language skills and motor skills.

# Mercury Reduction Information, continued

## What can you do to help?

**North Carolina prohibits the disposal of mercury into landfills**, so it is important that both residential and industrial users identify products in their homes and businesses that may contain mercury and dispose of them properly. If at all possible, replace products that are identified as having mercury with non-mercury containing products. There are many recyclers that can be found that offer mail in options for disposal. Some product manufacturer's also accept mail in returns when replacing mercury containing items with non-mercury items. The links below provide options for recycling and disposal. The City of Clinton provides a mercury bulb recycling option, and periodically holds Household Hazardous Waste Days for free and safe disposal. For more information about recycling mercury bulbs or the Household Hazardous Waste Day, please contact the Public Works and Utilities Department M-F from 7:00 AM to 3:30 PM at (910) 299-4905.

## Products that may contain mercury

- Thermometers (with silver liquid)
- Thermostats
- Light bulbs: Fluorescent, high-intensity (HID), and some LED bulbs
- Antiques: old mirrors, barometers, clock pendulums
- Automotive parts: cars built before 2003 may have mercury switches
- Batteries: button size, and types used in military and medical equipment
- Dental amalgam
- Electronics
- Some imported jewelry may have mercury enclosed in glass



## For more information on Mercury, Health Effects, and Recycling Options:

U.S. Environmental Protection Agency: [Mercury | US EPA](http://www.epa.gov/mercury) (www.epa.gov/mercury)

NC Department of Environmental Quality: [Household Fluorescent Lights | NC DEQ](https://deq.nc.gov/conservation/recycling/fluorescent-lights/recycling-options)  
(https://deq.nc.gov/conservation/recycling/fluorescent-lights/recycling-options)

Earth911: Call 1(800)CLEANUP, or go to [Recycling Center Search - Earth911.com](http://search.earth911.com)  
(https://search.earth911.com/)

NC Department of Health and Human Services: [NC DPH: Occupational and Environmental Epidemiology: Mercury \(ncdhhs.gov\)](https://epi.dph.ncdhhs.gov/oee/a_z/mercury.html) (https://epi.dph.ncdhhs.gov/oee/a\_z/mercury.html)