

# Town of Wallace Regional 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 volatizes readily. It has traditionally been used to make products like thermometers, switches, and some light bulbs.





The North Carolina Department of Environment and Natural Resources, Division of Water Quality (DENR), has issued a statewide total maximum daily load (TMDL) for mercury. The ultimate goal of the TMDL is to ensure safe levels of mercury in fish throughout North Carolina for human consumption.

The Town of Wallace has developed a Mercury Minimization Plan that will

evaluate the potential for non-domestic (industrial/commercial) users of the sewer system to discharge mercury into the collection system. The Town of Wallace and its satellite communities of Burgaw, Greenevers and Teachey will survey and evaluate 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 methlymercury then travel up the food chain from the bacteria to the fish to humans. This form of mercury is toxic to the fish and people.

Methlymercury 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 methlymercury may incur damage to their brain devlopment, cogninitve thinking, language skills and motor skills.



### 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 home/business that may contain mercury and dispose of them properly. If at all possible replace products that are indentified as having mercury with non-mercury containing products. Check with your trash provider to see if they have a recycling center near you that accepts mercury containing products. There are many recyclers that can be found that offer mail in options for disposal.

#### Products that may contain mercury

- Thermometers (with silver liquid)
- Thermostats
- Light bulbs-Fluorescent and high-intensity (HID) bulbs
- Antiques- old mirrors, barometers, clock pendulums
- Automotive parts- cars built before 2003 may have mercury switches
- Batteries
- Dental amalgam
- Electronics
- Jewelry-imported from Mexico may have mercury enclosed in glass
- Medical equipment and pharmaceuticals-mercurochrome, blood pressure cuffs
- Sporting equipment- light-up fishing pole tips, recoil suppressors in rifles











# For more information



U.S. Environmental Protection Agency www.epa.gov/mercury

NC Department of Environmental Quality https://deq.nc.gov/conservation/recycling/fluorescent-lights/recycling-options

> Earth911 https://search.earth911.com/

NC Department of Health and Human Services https://epi.dph.ncdhhs.gov/oee/a\_z/mercury.html

Town of Wallace (Wastewater Treatment Plant) https://www.wallacenc.gov/public-services/