

NEWPORT NEWS WATERWORKS DEPARTMENT

CHLORAMINE FACT SHEET

DATE: October 2014

BACKGROUND

Disinfection of drinking water is vital to protect the public from waterborne diseases. In the United States, Canada and other developed countries, water treatment has made once-common diseases like cholera and typhoid a thing of the past.

As part of its surface water treatment process*, Newport News Waterworks uses ozone as its primary disinfectant. Ozone kills microorganisms such as bacteria and viruses. Chloramine is used as a secondary disinfectant to maintain disinfection through the pipe system to the far reaches of our service area. The use of these two disinfectants have greatly reduced complaints regarding the smell and taste of chlorine in tap water.

Chloramine is a chemical compound of chlorine and ammonia, commonly used as a diluted solution to disinfect drinking water before it is delivered to homes. While it sounds simple, chloramine formation is far different from the mixing of two household chemical cleaners, bleach and ammonia. These chemicals are sold in high concentrations that become hazardous when mixed. The formation of chloramine is done at very low concentrations, measured in parts per million, under stringent drinking water guidelines.

Today, more than one in five Americans use drinking water treated with chloramine. Waterworks began using chloramine in January 1998. Today, Waterworks remains committed to providing drinking water that maximizes public health and minimizes potential health risks. Since chloramine disinfection reduces disinfection by-products (caused by chlorine and organic matter found in untreated water), it is an integral part of our commitment to public health protection.

**Waterworks also owns and operates the Lightfoot Well System in Upper York County. Water from the well system is not treated with ozone or chloramines, but merely receives a slight dose of chlorine for disinfection purposes and to ensure a disinfectant residual throughout the small distribution system.*

HEALTH CONCERNS

Every system in the human body depends on water. Water treated with chloramine is safe for people and animals to drink, and for other typical uses. However, there are special circumstances where chloramine must be removed from tap water:

- Kidney dialysis treatment. Patients, caregivers and dialysis providers should carefully follow the AAMI Standards that address chloramines. Dialysis patients should contact their physician if they have questions or concerns.
- Water used for fish and other amphibians. Pet stores carry products that will dechlorinate tap water.

FOR YOUR INFORMATION

Newport News Waterworks adheres to drinking water regulations set by the United States Environmental Protection Agency (US EPA) and guidance provided by the Virginia Department of Health (the regional VDH Office of Drinking Water is located in Norfolk).

PLEASE NOTE

- The US EPA states that current research and experience indicates chloramine is safe and beneficial at levels typically used to treat drinking water.

- It is possible that some individuals may be sensitive to chloramine just as some individuals are sensitive to chlorine. Customers should consult their physician if they have concerns.
- Newport News Waterworks joins the US EPA, the Centers for Disease Control and Prevention and the American Water Works Association in encouraging continued research on drinking water disinfection, including the safe use of chloramine as a disinfectant. We will continue to monitor results and adjust operations based on recommendations from the very best scientific and public health experts.
- Chloramine is not used to treat water from the Lightfoot Well System (in York County).
- Newport News Waterworks publishes an annual water quality report which includes information on water treatment processes and chloramine levels in our water.

Newport News Waterworks Customer Service

(757) 926-1000 Monday – Friday, 8am to 5pm