



# KINSTON PUBLIC SERVICES

Buildings & Grounds, Business Office, Electric, Engineering, Environmental Services, Fleet Maintenance, Meter Reading, Stormwater, Streets, Wastewater, and Water



*Kinston, the right place ... Kinston Public Services, the right choice.*

## Chlorine/Chloramine Water Treatment FAQ's

Beginning March 13, 2017 and continuing until approximately April 17, 2017, the City of Kinston will temporarily change the disinfectant used in the water treatment process. We will be using chlorine rather than chloramines during this four-week period.

### **Why Would Kinston Convert from Chloramines to Free Chlorine?**

This brief scheduled change in disinfectant is a standard water treatment practice to keep water mains clean and free of potentially harmful bacteria throughout the year.

State drinking water guidelines recommend that utilities using chloramines periodically switch to free chlorine for a minimum of four weeks. The temporary use of chlorine will ensure that a high level of disinfection is maintained throughout the network of water mains and pipes that deliver your drinking water.

Free chlorine is a more aggressive disinfectant than chloramines, and this temporary change in the water treatment process denies bacteria the ability to form resistance to the usual disinfection treatment process.

Switching to free chlorine is a proactive step to ensure that we maintain optimal levels of disinfection in the water distribution system.

As always, the drinking water will be regularly monitored to ensure that the water delivered meets, or exceeds, federal Safe Drinking Water Act standards.

### **What is Free Chlorine?**

Free chlorine is a slightly stronger disinfectant than chloramines, and may be used to remove more resistant bacteria and viruses that may be found in the water distribution system.

### **What is Chloramine?**

Chloramine is a disinfectant used in drinking water to remove bacteria and viruses that can make you sick. It is made up of chlorine and ammonia. Kinston has used chloramines as the disinfectant in our water treatment process since 2009.

### **Why Does Kinston Use Chloramines Most of the Year?**

While chlorine is an effective disinfectant, using chlorine alone creates byproducts, which are regulated by the United States Environmental Protection Agency. We can drastically and cost-effectively reduce byproduct levels through the use of chloramine.

Chloramine is a better long-term choice because it produces lower levels of disinfectant byproducts, like trihalomethanes, improves the smell and odor of water (compared to chlorine), and lasts longer in the distribution system to prevent bacterial growth.

### **When Will the Conversion Occur?**

Beginning March 13, 2017 and continuing until approximately April 17, 2017 (four weeks).

### **Will I Notice a Difference in My Water?**

Possibly. Some customers may notice a slight change in the taste and smell of their tap water. Free chlorine may have a bit of a chemical odor or smell slightly like water in a swimming pool. Each individual customer has his or her own sensitivity level to the taste and/or odor of free chlorine. Many detect no change at all. The mild chlorine taste and smell is normal and poses no health risk.

### **Are Free Chlorine and Chloraminated Water Safe?**

Yes, both forms of chlorine are effective and safe for people and animals to drink, for cooking and bathing, watering the garden and for all other common uses. However, precautions must be taken to remove or neutralize chloramines and free chlorine during the kidney dialysis process, in the preparation of water for fish tanks and ponds, and for businesses requiring highly-processed water. A de-chlorination procedure optimized for chloramine removal will work equally well with free chlorine.

People and businesses that normally take special precautions to remove chloramines from tap water, such as dialysis centers, medical facilities and aquatic pet owners, should continue to take the same precautions during the temporary switch from chloramines to free chlorine.

Most customers will not need to take any precautions as the water remains safe to drink and is treated according to both state and federal standards.

#### **● Kidney Dialysis**

Just like chloramines, free chlorine must be removed from water used in kidney dialysis machines. The City of Kinston has contacted representatives from the medical community to inform them of this temporary conversion. We advise customers who are dialysis patients to call their physicians or dialysis centers if there are any questions.

#### **● Fish Owners**

Like chloramines, free chlorine is toxic to fish. Fish owners need to remove chlorine, ammonia and chloramines from the water before use with tropical fish. Local pet stores carry water conditioners that remove chloramines and free chlorine. If you have questions about your fish, we recommend you contact your pet store for information and detailed instructions.

## **Where Can I Get More Information?**

Call the City of Kinston Customer Service Office at 252-939-3282 for more information about the conversion. The following are other resources for information on chlorine and chloramine disinfection for drinking water and pet fish care:

[http://water.epa.gov/lawsregs/rulesregs/sdwa/mdbp/chloramines\\_index.cfm](http://water.epa.gov/lawsregs/rulesregs/sdwa/mdbp/chloramines_index.cfm)  
<http://newaquariuminformation.com/aquarium-information/freshwater-aquariums/freshwater-aquarium-aditives/fresh-water-aquarium-aditives.htm>