

**Does bottled water have chloramines?**

It could. If the bottled water company uses water supplied by a water district that uses chloramines, then the water it provides will have chloramines in it, unless the company takes special steps to remove them.

**How about using chloraminated water on ornamental plants, vegetables, or fruit and nut trees? Will it be harmful?**

The small amount of chloramines should have no effect on plants of any type.

**Will a carbon filter remove chloramines?**

Yes, however, it must contain high quality granular activated carbon and you must permit sufficient contact time.

**Will chloraminated water used for agricultural purposes have any effect on fish in adjacent streams?**

Most water which runs into streams and ponds would be agricultural, landscaping or storm water drainage. After water has been used for one purpose, it probably would not have enough residual chloramine to affect fish.

**If you have any questions, please contact the office at (252) 752-7420.**



# Chloramines

---

What Dialysis Patients, You and  
Your Fish Need to Know!

**Eastern Pines Water Corporation**

5442 Eastern Pines Road  
Greenville, N.C. 27858  
(252) 752-7420  
epwc.org

**Eastern Pines Water Corporation (EPWC) is now using chloramines as a disinfectant, which is a combination of chlorine and a small amount of ammonia. Although chloramines have been used for decades and are safe for human consumption, it is not tolerated by aquatic life and dialysis patients.**

### **Why did my water supplier make the change to chloramines?**

The conversion to chloramines will allow EPWC to meet stricter state and federal water quality regulations. Currently, EPWC uses chlorine gas alone as a disinfectant. While chlorine is a powerful disinfectant, it has the potential, under certain circumstances, to cause the development of elevated levels of Trihalomethanes and Haloacetic Acids. Although these compounds are not an immediate concern to your health, long term consumption of water containing elevated levels of these compounds may increase your risk of developing serious health issues. Chloramines are being used to assist EPWC with compliance issues and combat Stage I Disinfection Byproducts Rules as guided by the NC Department of Environment and Natural Resources Division of Public Water Supply Section (PWSS). Chloramines are also being used because of their ability to last in the distribution system. As an added benefit, chloramines have virtually no odor or taste.

### **What are Trihalomethanes (TTHM's) and Haloacetic Acids (HAA5's)?**

TTHM's and HAA5's are chemical compounds that are formed when chlorine mixes with naturally occurring organics in water

### **Why do kidney dialysis patients have to take special precautions?**

In the dialysis process, water comes in contact with the blood across a permeable membrane. Chloramines in that water would be toxic, just as chlorine is toxic, and must be removed from water used in kidney dialysis machines. Medical centers that perform dialysis are responsible for purifying the water that enters the dialysis machines.

### **What should people with home dialysis machines do to remove chloramines?**

It is our understanding that home dialysis service companies can make the needed modifications, by you should check with your physician to be certain.

### **How do chloramines affect fish and aquatic life?**

While chloraminated water that customers receive will meet or exceed all state and federal drinking water standards, chloramines are harmful to fish and other aquatic life. That's because fish and other aquatic animals take chloramines directly from the water into their bloodstreams through their gills. Just like chlorine, chloramines will need to be removed from water for fish, amphibians and reptiles, as well as live holding tanks for aquatic invertebrates. You may not have had to remove chlorine from your aquarium water because it disappears rapidly on its own. This is not the case with chloramines and steps should be taken to remove chloramines. Most pet stores have sold dechlorinating agents for years and have recommended using them

Please check with your pet supplier and make sure that whatever product you use has been given time to work before adding aquatic life.

### **What will effected businesses need to do?**

Certain businesses using highly processed water may need to remove chloramines prior to use. Since chloramines can be fatal for aquatic life, restaurants or seafood suppliers with live tanks, as well as live bait shops should review current operations and take steps to ensure their water is treated appropriately for use.

### **Won't letting water sit for a few days remove chloramines from tank or pod water?**

No. Unlike chlorine, which dissipates when water sits for a few days, chloramines may take weeks to disappear. If you don't want to use a dechlorinating chemical, the next best solution is to install a granular activated filter and allow sufficient contact time.

### **If Chloramines are toxic, won't they harm people and pets?**

It's only when water interacts directly with the bloodstream-as in dialysis or in a fish's gill structure-that chloramines must be removed. Dialysis patients can bathe in and drink chloraminated water.

### **Do home water softeners, reverse osmosis (RO) units or boiling remove chloramines?**

No. Most water softeners are not designed to remove chloramines. Salts can be caught by the permeable membranes but chloramines pass through easily when using RO filtration. Boiling will not remove chloramines.

