

NOTICE

Beginning October 2012

MARYVILLE WATER TREATMENT PLANT TO CHANGE DISINFECTION METHODS FOR DRINKING WATER.

This is a notice to our customers that starting in October of 2012 Maryville Water Treatment will be changing its process for drinking water disinfection from using chlorine to chloramines. Chloramination is a widespread, common and older means of disinfection. Water treated with chloramines can and should be used like water disinfected with just chlorine. Chloraminated water is just as safe for drinking, cooking, bathing and any other many uses. However safe, there are two specific groups of users that should take special care with chloraminated water:

- **Kidney Dialysis Patients**
- **Live Fish or Other Aquatic Animal Owners**

We have compiled a list of Frequently Asked Questions to help answer some of the questions you may have about Chloramination. And, as always, you can contact Joe Finch at the Water Treatment Plant (660) 562-3713 or by emailing your questions to jfinch@peopleservice.com.

Frequently asked Questions

General

Why is Maryville Switching to Chloramination?

Maryville is making the switch to chloramines to help prevent the formation of trihalomethanes (THMs). THMs are byproducts of chlorine combining with the naturally occurring organic matter in raw water. THMs are **suspected** carcinogens (cancer causing substances) when at elevated levels and consumed over a lifetime. Chloramines do not readily form THMs when combined with organic material in water.

What is chlorination?

Chlorination is defined as "the application of chlorine to water, generally for the purpose of disinfection, but frequently for accomplishing other biological or chemical results (taste and odor control)" Chlorination is the method of disinfection that the Maryville Water Treatment uses and has been used to meet state and federal standards for several years now.

What is chloramination and how is it different from chlorination?

Chloramination is the application of chlorine and ammonia to water to form chloramines for the purpose of disinfection. Chloramines are less reactive than chlorine but still provide an adequate protection against bacteria in drinking water. Cities all over the U.S. have used chloramines for several years now. Examples of Missouri cities using chloramines now include Macon and Kansas City.

What are some advantages to using chloramines?

As discussed before, the formation of Trihalomethanes will be greatly reduced while being able to still kill or inactivate the bacteria in the water. Also, since chloramines take longer to break down, disinfectant will be able to reach the most remote areas of our distribution system. In addition, there should be less of a chlorine odor and taste in the water.

What are some disadvantages to using chloramines?

Chloramines may accelerate the aging of rubber materials in household plumbing fixtures. There are more chloramine resistant materials on the market but failure of household fixtures isn't a common/widespread problem. Also, as stated before, people on kidney dialysis should take special notice and consult their physician or dialysis center if they have any questions.

Will chloramination disrupt how I routinely use water in my home?

NO. Chloramination will not affect routine water use in your home. Household laundering, dishwashing, plant watering, and food preparation will not be affected whatsoever.

Are there methods to remove chloramines from my water?

Although it is not necessary to do this for routine household use, if a person wanted to they can install a GAC (granular activated carbon) filter to help remove the chloramines. These filters must be properly maintained however and may not be effective enough or adequate for kidney dialysis patients or for water to be used in aquariums. Water softeners and Reverse Osmosis systems are not effective in removing chloramines.

Health Effects

Why are chloramines an issue with Kidney Dialysis patients?

Chloramines must be removed from water used in kidney dialysis machines because they are harmful when they go directly into the bloodstream. Chloramines in dialysis water would be toxic, just as chlorine would be, and must be removed. Dialysis centers are responsible for purifying water that enters their dialysis machines. Customers with home dialysis equipment must contact their physicians or dialysis centers regarding chloramination and how it will affect them. Chloramines must be removed from any water that will be used in the dialysis process. Dialysis patients can also contact the manufacturer of their dialysis equipment for more information. Dialysis patients can still bathe in and consume chloraminated water.

Will chloramines harm my pets?

No. Chloramines are only harmful to fish and aquatic/semi-aquatic life. Chloramines should be removed from water that is used in fish tanks, ponds and aquariums. Contact a knowledgeable supplier or veterinarian for information on how to remove chloramines from water used for these purposes.

Can pregnant women, children and infants drink chloraminated water?

Chloraminated water is perfectly safe for pregnant women, children and infants.

For More Information

Please contact Joe Finch at the Maryville Water Treatment Plant by calling 562-3713 or by emailing him at jfinch@peopleservice.com. Office hours are 7am-3:30pm Monday-Friday.