

Free Chlorine Disinfection – Frequently Asked Questions

Overview

Beginning on **Sunday, April 27th, 2014**, the Union Water Supply System (UWSS) will be temporarily changing to a free chlorine disinfection method in the water distribution system for the UWSS service area, which includes the Municipality of Leamington, Town of Kingsville and parts of the Town of Essex and Town of Lakeshore. This temporary change in the treatment system is to facilitate a long term maintenance program on the system and to control bacterial re-growth within the distribution system.

Free Chlorine disinfection is one of the Ministry of the Environment's (MOE) approved methods for drinking water disinfection in Ontario and is one of the most widely-used processes across North America.

Currently, UWSS uses chloramine to provide a longer lasting disinfectant in the distribution system. On April 27th, 2014, UWSS will be temporarily switching to a free chlorine method for its service area. Free Chlorine is a stronger disinfectant than Chloramine, and it will be used for enhanced maintenance of the water distribution systems **to maintain UWSS' high standard of water quality**.

Some Frequently Asked Questions include the following:

What is Chloramine?

Chloramine is a disinfectant used in drinking water to control bacteria and viruses. It is made up of chlorine and aqueous ammonia. This is currently the form of disinfection that is used in the UWSS water supply.

Why are you converting from Chloramine to Free Chlorine?

UWSS is temporarily switching to a free chlorine method in its service area. This temporary change in the treatment system is part of an enhanced maintenance program and also to control bacterial re-growth within distribution system pipes. Free Chlorine is a stronger disinfectant than Chloramine, and it will be used as an enhanced maintenance practice as we flush the water distribution systems to maintain UWSS' high standard of water quality.

What is the difference in benefits between Chloramine and Free Chlorine?

While Chloramine has certain benefits (odour is less noticeable, longer disinfectant persistence in the distribution system, less likely to form disinfection by-products), Free Chlorine is a stronger disinfectant. Free chlorine is more aggressive on nuisance biological growth in the distribution system.

When will the conversion occur?

Conversion is planned to occur on the Sunday, April 27th, 2014.

Will I need to do anything differently during the conversion?

No action is necessary. Customers may drink and use their water as normal. The UWSS, OCWA and municipal water department staff from Leamington, Kingsville, Essex and Lakeshore will be flushing the distribution system to change over all the water in the pipes in the selected area from chloramine to free chlorine. As the transition in water chemistry moves through the distribution pipes, temporary changes in taste and odour may be experienced by some people. If you experience discolouration, run the cold water tap until it runs clear, generally for 5-10 minutes. If discolouration persists, call the UWSS treatment plant at (519) 326-4447 or contact your local municipal water department.

Will my water taste different after the conversion to Free Chlorine?

Most people will not notice any change. Each individual has his or her own sensitivity level to the taste and/or odour of Chlorine.

Is Free Chlorine and Chloraminated water safe?

Yes, both forms of chlorine are effective and safe. Both forms of chlorinated water are safe for people and animals to drink, for cooking and bathing, watering the garden, and for all other common uses. Just as with Chloramine, precautions must be taken to remove or neutralize Free Chlorine in the preparation of water for fish tanks and ponds, and for businesses requiring highly-processed water.

What should dialysis patients know about Free Chlorine?

Both Free Chlorine and Chloramine need to be removed from water before passing into the bloodstream. Like everyone else, dialysis patients may drink water treated with either Free Chlorine or Chloramine because the digestive process neutralizes these chemicals before they can enter the bloodstream. Customers with home dialysis equipment should contact their physicians and check with equipment manufacturers for more information.

How can I remove chlorine taste/odour from my water?

The easiest and most effective way to remove any chlorine taste is to put a pitcher of water in the refrigerator. Adding a lemon wedge, or using a home water treatment device (i.e. Brita water filter) that employs granular activated carbon or reverse osmosis, will also reduce or remove chlorine taste/odour.

Will pool owners need to treat water differently?

Pool owners must maintain the same chlorine level in water treated with either Free Chlorine or Chloramine to prevent algae and bacterial growth. Pool supply stores can provide pool owners with more information.

Where can I get more information?

If you have any questions or concerns with the temporary free chlorine treatment, are experiencing persistent water discolouration or a significant reduction in water pressure to your home, please contact the UWSS Water treatment plant at (519) 326-4447 or your local municipal water department at the following numbers:

Municipality of Leamington:	519-326-5761
Town of Kingsville:	519-733-2305
Town of Essex:	519-776-7336
Town of Lakeshore:	519-728-2700