

# Frequently Asked Questions

# Chloramine Conversion



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## What are chloramines?

Chloramines are disinfectants added to the water for public health protection. Chloramines are most commonly formed when ammonia is added to chlorine to treat drinking water. Chloramines provide long-lasting protection as they do not break down quickly in water pipes.

The Environmental Protection Agency (EPA) approves the use of chloramines as a disinfectant in drinking water.

## Why are water utilities switching from a chlorine disinfectant to a chloramine disinfectant?

In order to meet new stricter EPA regulations, which go into effect in 2012 and require water utilities to control levels of regulated disinfection byproducts (DBPs), Tulsa's water utility is changing the way water is treated in the distribution system.

Currently, the City of Tulsa is using chlorine at the water treatment plants and in the water distribution lines to disinfect your drinking water. Chlorine kills microbes like viruses and bacteria that make you sick, but chlorine also reacts with organic matter in water sources to create DBPs.

## Beginning in November 2011, chloramine will be used as a secondary disinfectant to further lower the concentration of DBPs in the distribution lines carrying water from the treatment plants to your house.

(Chlorine will continue to be used as a primary disinfectant at the water treatment facility.)

## Are chloramines safe?

Yes, chloramines have been used safely in the U.S., Canada and Great Britain for more than 90 years. Nearby cities such as Oklahoma City, Sand Springs, Lawton, Norman, Denver, Dallas and Fort Worth have been using chloramines as part of their treatment process for decades.

Chloraminated water is safe for bathing, drinking, cooking and all everyday uses. However, chloramine, like chlorine, must be removed from water before treating kidney dialysis patients and before use in aquariums or fish ponds.

## What types of special precautions do kidney dialysis patients have to take?

Chloramine, like chlorine, must be removed from the water before it can be used in kidney dialysis machines. Kidney dialysis patients should contact their physician or local kidney dialysis center for guidance on modifications to dialysis machines and procedures. Medical centers that perform dialysis are responsible for purifying the water that enters the dialysis machines.

Kidney dialysis patients can still bathe, drink and cook with chloraminated water. The digestive process neutralizes the chloramines before they reach the bloodstream. It's only when water interacts directly in the blood stream, as in dialysis, that chloramines must be removed.

## What does the change in water disinfection mean for fish and fish owners?

Chloramine, like chlorine, must be removed from water before it is added to aquariums or fish ponds, including fish and lobster tanks in restaurants and stores. The ammonia in chloramine is toxic to fish and other aquatic life, as it enters the bloodstream directly through the gills.

Pet owners should visit local pet stores and pet suppliers for dechloramination products and instructions. Water conditioners specifically designed for removing chloramines are commercially available.

## Where can I get more information about the upcoming change?

If you have additional questions or concerns, please visit [www.tulsawater.com](http://www.tulsawater.com) or call the Mayor's Action Center at (918) 596-2100.

# Frequently Asked Questions

## Flushing of Water Pipelines



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### What is flushing?

Flushing is a process by which pipelines in the City's water distribution system are cleaned to ensure the highest quality of drinking water for Tulsa residents. With unidirectional flushing, City maintenance crews open water hydrants and pipe valves so water can rush through the pipelines to clean out any accumulated sediment or minerals.

### Why is the City flushing water pipelines?

- To provide Tulsa residents the highest quality drinking water possible.
- To prepare the distribution system for a switch from chlorine disinfection to the use of chloramines in fall 2011.

### What might happen when my water pipelines are flushed?

Residents may notice a temporary change in water pressure or in the color of their water.

- If your water becomes discolored, simply run cold water faucets until the water is clear.
- Some streets may experience minor short-term flooding or possible lane closures due to runoff.
- *Residents should avoid doing laundry until the water is clear.*

### Is flushing safe?

Flushing is safe and is done as part of the City's routine line maintenance in many Tulsa neighborhoods. In fact, flushing rids the lines of sediment or minerals such as iron and manganese that have accumulated inside pipes. The flushing process also allows crews to check hydrant and valve operations.

### When will flushing occur in my neighborhood?

City crews will begin flushing in early May. Residents will be notified by door hangers if flushing is occurring in their neighborhood.

### Is the City flushing all water pipes?

No, crews will begin flushing the City's oldest water distribution lines first in preparation for the City's conversion from a chlorine disinfectant to the use of chloramines in fall 2011. Crews will flush as many areas as needed before the conversion takes place.

### Where can I learn more about flushing?

If you have additional questions, please visit [www.tulsawater.com](http://www.tulsawater.com) or call the Mayor's Action Center at (918) 596-2100.