

# **Utility Special District** City of Riviera Beach, Florida

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# Frequently Asked Questions About Free Chlorination

#### What is Free Chlorination?

Free chlorination is a **temporary** process that distributes free chlorine in place of combined chlorine (or chloramines) throughout the water distribution system as part of routine distribution system maintenance.

Free chlorination is a common practice used by water producers using the chloramine treatment method. It is typically performed once or twice per year over a two to four week time-period to remove biofilms from inside the distribution pipes.

#### What is Free Chlorine?

Free Chlorine is the use of chlorine-only, which is a stronger disinfectant than chloramines.

#### What are Chloramines?

Chloramines are a disinfectant used in drinking water, which combines chlorine and ammonia together.

#### How is chlorine added to drinking water?

Water treatment operators may chlorinate drinking water using either chlorine gas, liquid sodium hypochlorite solution (bleach), or dry calcium hypochlorite. The USD uses sodium hypochlorite.

#### How common is chlorine disinfection of drinking water?

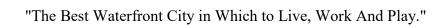
Chlorine is by far the most commonly used drinking water disinfectant in all regions of the world. Today, about 98 percent of U.S. water treatment systems use some type of chlorine disinfection process to help provide safe drinking water. The U.S. Environmental Protection Agency requires treated tap water to contain a detectable level of chlorine to protect against germs as it flows from the treatment plant to consumers' taps.

## Is chlorine in drinking water safe?

The small amount of chlorine added to disinfect drinking water in accordance with U.S. Environmental Protection Agency regulations is safe for consumption. According to EPA, allowable chlorine levels in drinking water (up to 4 parts per million) pose "no known or expected health risk.

#### How long will the free chlorination process last?

This is a temporary process that will last approximately three weeks.



#### Do other cities perform free chlorination?

Yes. This a common industry practice. There are many utilities in Palm Beach County and throughout the country that use chloramines as a distribution system disinfectant which convert to free chlorine on a periodic basis.

## Does free chlorination change or affect water quality?

No, the drinking water still meets all State and Federal water quality standards.

#### Will I notice a change in my water?

Some people may notice a change in the taste or odor during this time, but adverse health effects are not expected.

#### Why does my water taste/smell different?

Your water may taste or smell different because the Utility Special District is temporarily changing its disinfection process. There will be a change from chloramines to chlorine only. Water systems using chloramines periodically change to chlorine as part of a maintenance program within the water distribution system. During this temporary change to chlorine, you may notice a slight difference in the taste or smell of your tap water.

#### What can I do to improve the water taste/smell?

We suggest storing water in an open pitcher and placing it in your refrigerator. The chlorine will naturally dissipate from the water, and will become less noticeable. Also, colder water tastes better.

# Why are you doing this during this time of the year?

As part of our commitment to provide safe and reliable water, the Utilities plant staff always monitor the water to determine when the system might need treatment change.

## What are the methods for removing chlorine/chloramines from fish aquariums?

Just as with chlorine, chloramines can harm all saltwater and freshwater fish, reptiles, shellfish, and amphibians that live in water. Commercial establishments and hobbyists involved in fish rearing need to take precautions. There are two methods that can be used to remove or neutralize chloramines before adding water to a fish tank, pond, or aquarium: (1) Granular Activated Carbon (GAC) filtration system specifically designed to remove chloramines, or (2) conditioner or additive that contains a de-chlorinating chemical for both ammonia and chlorine. It's always best to get professional advice before proceeding.

#### I notice the hydrant on my street flowing. Is this part of the free chlorination process?

Flushing fire hydrants is a routine part of the free chlorination process. This will occur in various parts of the City, as a result, increased flushing may be observed during this time.

