

Pinellas County Utilities made a necessary change to our water disinfection process. In **May 2002**, the disinfectant of our potable (drinking) water was changed from chlorine to chloramine. *Chloramine* is a form of disinfectant produced by combining chlorine with ammonia. Both chloramine and chlorine are disinfectants that destroy potentially harmful bacteria should they enter the potable water system.

Chloramines have been used safely in the United States and Canada for many years. St. Petersburg, Tampa and Miami/Dade are among the cities in Florida which use chloramines as part of their water treatment process. For most normal uses of potable water, chloraminated water is the same as chlorinated water. There are two groups of people, however, who need to take **special care** with chloraminated water: **kidney dialysis patients and fish owners**. Chloramines must be removed from the water used in the kidney dialysis process and from water that is used in fish tanks and ponds.

This brochure will help you understand chloramines and the water treatment process. If you have any questions about this topic or any other water quality issue, please contact us at 727/464-4000.

WHY?

did Pinellas County change to chloramines

- ▶ Tampa Bay Water, our water supplier, changed its potable water disinfectant to chloramines.
- ▶ Tampa Bay Water changed the regional water supply from groundwater alone to include groundwater, surface water and desalinated water.
- ▶ Chloramine disinfection is one way to comply with new and stricter health standards under the USEPA's Safe Drinking Water Act.
- ▶ Use of chloramines reduces the regulated cancer-causing compounds, such as trihalomethanes (THMs), which result from the combination of chlorine with organics found in surface water.

WHO?

was affected by this change

- ▶ All retail customers of Pinellas County Utilities and water customers of the cities of Clearwater, Oldsmar, Pinellas Park, Safety Harbor and Tarpon Springs were affected by this change.

WHERE?

can you get more information

- ▶ If you have any questions about this water treatment process or our water quality control program, please contact Pinellas County Utilities at **727/464-4000** or visit us at www.pinellascounty.org/utilities.

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Pinellas County Utilities
14 S. Fort Harrison Avenue
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CHLORAMINES

PINELLAS COUNTY UTILITIES

What You Need To Know



KIDNEY DIALYSIS

► **What special precautions should kidney dialysis patients take?**

Kidney dialysis patients can safely drink, cook, and bathe in chloraminated water. However, chloramines must be removed from the water used in kidney dialysis machines.

Dialysis systems already pre-treat their source water to remove chlorine. However, some modifications will be necessary to remove the chloramines. Home dialysis service companies can usually make the needed modifications, but you should check with your physician to be certain.

All medical facilities that perform kidney dialysis have been notified of this change to chloraminated water treatment. According to the ESRD [End Stage Renal Disease] federal regulations, these facilities are responsible for purifying the water that enters the dialysis machines.



If you have any questions or concerns, please consult with your physician.

FISH OWNERS

For Aquatic Life and Pets

► **What special precautions should fish owners take?**

Chloramines must be removed from any water to be used for fish tanks or ponds. Chloramines are toxic to saltwater and freshwater fish, reptiles, turtles and amphibians, and must be removed. This includes lobster tanks at grocery stores and restaurants as well as fish containers at bait shops.

You may not have had to remove chlorine from your aquarium water because it dissipates (evaporates) rapidly on its own. This is not the case with chloramines and specific steps must be taken for their removal.

Chloramines can be removed from the water by using a water conditioner specifically designed to remove chloramines or by using a granular activated carbon filter. Your pet supplier should be able to provide any further guidance you may need on these products.

► **What are the effects of ammonia on fish?**

Ammonia can be toxic to fish. Although all fish produce some ammonia as a natural by-product, ammonia is also released when chloramines are chemically removed. Some ammonia levels may be tolerable in individual tanks or ponds for short periods of time; however, commercial products are available at pet supply stores to remove excess ammonia. Biological filters, natural zeolites, and pH control methods are also effective in reducing the toxic effects of ammonia.

► ► ► ► **FAQs**

FREQUENTLY ASKED QUESTIONS

Are chloramines new?

No. Many cities in the U. S. and Canada have used chloramines for decades.

Are chloramines safe?

Yes. The U. S. Environmental Protection Agency (USEPA) accepts chloramines as a disinfectant and as a way to avoid formation of known carcinogens in the trihalomethane family of compounds. Chloraminated water is safe for bathing, drinking, cooking and all uses we have for potable water every day. However, there are two groups of people who need to take special care with chloraminated water: kidney dialysis patients and fish owners.

What are trihalomethanes (THMs)?

THMs are some of the chemical compounds that are formed when chlorine mixes with naturally occurring organics in water. The USEPA has determined some THMs to be carcinogens (cancer-causing agents) for people.

If chloramines are harmful to fish, how can people safely drink the water?

Chloraminated water is no different than chlorinated water for all of the normal uses we have for potable water, including drinking. The digestive process neutralizes the chloramines before they reach the bloodstream. However, fish absorb chloramines directly into their bloodstreams through their gills, which can be fatal.

Can pregnant women and children drink chloraminated water?

Yes. Everyone can drink water that contains chloramines.

Can you safely wash an open wound with chloraminated water?

Yes. It is safe to use chloraminated water in cleaning an open wound because virtually no water actually enters the bloodstream that way.

Can you safely water plants, vegetables or fruit and nut trees?

Yes. The small amount of chloramines in the water supply will have no effect on plants of any type.

Will chloramines affect your swimming pool?

No. You will still need a free chlorine residual to retard algae and bacteria growths. Contact your local pool supply stores for specific information.

Do home water purifiers remove chloramines?

Most home purifiers are not designed to remove chloramines. Consult your manufacturer for specific information.

NOTE:

High quality granular activated carbon filters may remove chloramines provided sufficient contact time is permitted.

Where can I get more information about chloramines in Pinellas County?

You may contact Pinellas County Utilities at 727-464-4000 for more information on chloramines. Also, visit us online at www.pinellascounty.org/utilities to get up-to-date water quality information.