Know the Facts!

Fish, Amphibians, Pond, and Pool Owners

Preparing for Chloramines

In early spring 2011, the following water utilities in Archdale, Burlington, Greensboro, High Point, Jamestown, Piedmont Triad Regional Water Authority, Randleman, and Reidsville will embark on a modification of their current water treatment process. The new process will involve switching the disinfectant product from free chlorine to chloramines to comply with new federal regulatory standards. Chloraminated water is safe for drinking, bathing, cooking, and all other uses we have for water every day. However, there are three groups that need to take special precautions when using chloraminated water: kidney dialysis patients, fish, pond and aquarium owners, and specialized businesses using high quality treated water.

What are chloramines?

Chloramines are a disinfectants used to treat drinking water. They are formed by mixing chlorine with ammonia at carefully controlled levels. Similar to chlorine, chloramines are effective at killing harmful bacteria and other germs. Chloramines have been used safely in the United States for many years.

Why are chloramines toxic to fish, reptiles, and amphibians?

Chloramines are a combination of chlorine and ammonia, both which are harmful for fish, amphibians, and reptiles. When water that contains chloramines is digested by humans that water is neutralized by the digestive system before it reaches the bloodstream. Since chloramines enters directly into the bloodstream through gills this inhibits the red blood cells ability to carry oxygen.

What precautions should fish shops, hobbyists, and aquaculture businesses take?

Chloramines must be neutralized or removed from the water that is used in fish tanks, ponds and aquariums. Unlike free chlorine, chloramines do not dissipate as quickly from water. As chloramines are removed, ammonia is released and must also be removed prior to coming in contact with fish, amphibians and reptiles. Households, fish shops, hobbyists, and other business that keep aquatic animals should contact knowledgeable suppliers or veterinarians.

Are chloramines toxic to both saltwater and freshwater fish?

Yes. Chloramines is not only toxic to both saltwater and freshwater fish, but reptiles, turtles, and amphibians.

Will letting water sit for a few days cause chloramines to disappear?

No. Unlike chlorine which will eventually dissipate, chloramines may take weeks to disappear.

What methods are available to remove chloramines and ammonia?

Chloramines can be removed by one of two methods; a carbon filter that contains a high quality granular activated carbon, or water treatment products designed to remove chloramines. Ammonia must also be removed because of the potentially toxic effect it may have on fish. Biological filters, and natural zeolites can be effective at removing ammonia.

Will chloramines harm other pets?

No. Chloramines is only potentially harmful to fish and other aquatic or semi-aquatic life.

Will boiling remove chloramines?

No. Chloramine cannot be removed by boiling water, adding salt, or letting water stand in an open container to dissipate.

What test will determine if the water is safe for aquatic animals?

Aquarium owners should monitor their ammonia and "total"chlorine not "free" chlorine concentrations levels closely. A total chlorine test or combined chlorine test should be available at local pet or pool supply stores, and chemical supply houses.

Will reverse osmosis remove chloramines?

No. Only salts are caught by the permeable membranes, allowing chloramines to easily pass through.

Will chloramines affect swimming pools?

No. Pool owners will still need a free-chlorine residual to retard algae and bacteria growth.

Will chloramines change the PH of the water?

No. The PH of the water should remain the same.

Questions?
Contact Your Local Water Provider

City of Archdale
(336) 434-7364

City of Burlington
(336) 222-5133

City of Greensboro
(336) 373-2489

City of High Point
(336) 883-3415

Town of Jamestown
(336) 454-1138

Piedmont Triad Regional Water Authority
(336) 498-5510

Town of Randleman
(336) 495-7500

City of Reidsville
(336) 349-1070