Fact Sheet for Fish, Amphibian and Pond and Pool owners

In June 2012 Glendale Water and Power will convert a small portion of the distribution system from a free chlorine residual to a chloramine residual. This change will impact all GWP customers who live in Northern Glendale above Oakmont Golf Course in the Verdugo Canyon, including Montrose and La Crescenta. Drinking water throughout the rest of Glendale has been receiving water with chloramines since 1985.

This conversion will be done to comply with new federal drinking water regulations and will match the disinfectant residual in the rest of Glendale. Water with chloramines is safe for drinking, bathing, cooking and all other uses for water. 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 highly treated water.

What are Chloramines?

Chloramines are a disinfectant used to treat drinking water. Chloramines 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 Glendale and throughout the United States for years.

Why are chloramines toxic to fish, reptiles and amphibians?

Chloramines are a combination of chlorine and ammonia, both of which are harmful for fish, amphibians, and reptiles. When water that contains chloramines is consumed by humans the chloramines are neutralized by the digestive system before reaching the bloodstream. Because freshwater and saltwater fish breathe through gills, chloramines can enter directly into the bloodstream through gills, and this inhibits the ability of red blood cells 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 are toxic to saltwater and freshwater fish. Chloramines are also harmful to 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; 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 are only potentially harmful to fish and other aquatic or semi-aquatic life.

Will boiling remove chloramines?

No. Chloramines cannot be removed by boiling water or adding salt.

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. Reverse osmosis will not remove chloramines.

Will chloramines affect swimming pools?

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

Will chloramines change the pH of the water?

No. Chloramines will not change the pH of the water.