

# Chlorine Conspiracy

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*By Larry Lunsford*

There seems to be a global conspiracy to kill our fish with chlorine. I was in charge of water quality for the 1999 RMKC Koi Show. I tried to prepare as well as possible. I ordered an Aquarium Pharmaceuticals chlorine test kit from That Pet Place, only to find they don't carry them any more (Aquarium Pharmaceuticals discontinued production of their chlorine test kits about a year ago). They suggested a Red Sea kit, so I said ok. Well, they sent me a pH kit instead. I searched the entire Denver metro area for a good chlorine test kit. In the 15-20 pond / pet / aquarium stores I searched, I found one Aquarium Pharmaceuticals kit dated 4/97 (the only kit in the store) and a Red Sea kit (one of two in the store) with an expiration date of 10/98. The Red Sea kit is supposed to give a color from blue to purple - mine stays clear. At least the AP kit seems to be working (it shows a positive result for my tap water), even though it's over two years old.

Last year, RMKC had their show at a Petsmart and I was in charge of water quality and was having difficulty finding a fresh chlorine test kit. The Petsmart manager assured me that there was no need to worry - their mega\$ filter system couldn't possibly allow chlorine to get through. He showed me the filter system and it was quite impressive. Well, me, ever the pain in the ass, insisted that we test the water. I had three or four people scouring the country side for a good kit. We finally dug one up. Guess what? The mega\$ filter system at Petsmart was passing around 1ppm chlorine. It was more chlorine than could be neutralized by the "typical" dose of 1 drop of dechlor per gallon of water. I had to add a second dose of dechlor.

In my searches, I've come across many snot nosed kids in pet shops who tell me "You don't need to test, just use 1 drop of dechlor per gallon and everything will be just fine." B\_\_\_ S\_\_\_!!! Its taken all the self control I can muster to keep myself from ripping off their heads and S\_\_\_ing down their necks. Never take advice from kids at a pet store. They recommend what they sell wether you need it or not and of course, they don't recommend what they don't sell even if it's what you need.

While living in Virginia, I witnessed many surges of chlorine in the city tap water. One surge (which killed many of my best Koi) was in the area of 20ppm to 40ppm chlorine. This is not only bad for Koi, its unhealthy for humans.

In Colorado, the townhouse I was previously renting had its water heater replaced three times in the span of two years (two while rented by previous tenants and one while I was there). I came home one day to find the pressure relief valve popped open and water spewing from the water heater. When the plumber came out, he checked everything out and found no problems. He left a pressure gauge on the heater and told me to check it periodically. It was showing 45 PSI while the plumber was there. Two hours later, it was showing 140 PSI. Over the course of the next few days, the pressure fluctuated between 20 PSI and pegging the gauge at 160 PSI. Before the plumber got back to install a pressure controller, the gauge ruptured. If this is how the water department controls pressure, should I expect them to control chlorine any better? I recently learned that my local water department got shut down for a while because they discovered hydrazine in the water. Hydrazine is a component of rocket fuel. Lockheed-Martin Marietta has a plant just down the road.

Many of the pond keepers I talk to tell me "My water just has a little chlorine in it - aeration will take care of it. I don't need to test." If they don't test, then how do they know if today's dose is just a little or a whole lot? Even if it is just a little, do you really want to give your koi repeated shots of chlorine? If you don't test, how do you know if they haven't switched to chloramine (chlorine + ammonia which can't be removed with aeration)? Even if you call the water dept. and they tell you they use chlorine,

do you think they're going to give you a call before they switch to chloramine? Do you really believe that any one person at the water department knows all that goes on?

The moral of these little stories is: don't trust your water department - you never know what's going to come out of the tap. Take charge of your own water quality! To defend yourself and your Koi from the chemical conspiracies being conducted by water departments everywhere, I suggest the following:

First: quarantine your new water. Before you allow new water to come in contact with your Koi, check it. Add dechlor or aerate until there is no trace of chlorine. Add baking soda if your alkalinity is too low (either in the new water or in the pond). Heat the new water if it's much colder than what's in the pond (or give it time to allow it to come up to the pond temperature). Many of you may be saying "I can't quarantine my water - my pond is too big, I don't have a big enough storage tank." Oh contrair! You may already have a quarantine tank and don't even know it. Many ponds feature a small upper pool that feeds a stream that goes into the main pond. Use this upper pool for your quarantine tank. You may need to alter your plumbing to allow the upper pool to be bypassed, but you should do this anyway so that you can bypass the waterfall in the winter.

Second: pre-filter your water with an activated carbon filter. Use two filters in series. Periodically check the water coming out of the first filter. If it shows any trace of chlorine, change your media. When you change media, put the media from the second filter into the first filter and put new media into the second filter. This way, you always have a full capacity filter ready to defend against that rogue surge of chlorine. Activated carbon will also remove many impurities we can't easily test. Depending on how bad your tap water is, you may just be helping your own health too.

Third: demand that your pond supplier get you a good chlorine test kit! If they don't sell them, does that mean that they don't use them either? What are they doing to those Koi before they sell them to you?