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## PRESS RELEASE

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# WQA testifies about pharmaceuticals in water before Illinois State Senate

Public Health Committee asks for input from experts

**Lisle, Illinois USA** — Joseph Harrison, technical director of the Water Quality Association, testified today about the issue of pharmaceuticals in drinking water before the Illinois Senate Committee on Public Health.

Harrison, former Chief of the Safe Drinking Water Branch for Region V of the U.S. Environmental Protection Agency, discussed a public opinion survey conducted for WQA on public attitudes on the issue. He also talked about standards for treating contaminants.

“WQA believes that through testing, the development of independent standards, and consumer education, concerns about pharmaceuticals in the water can be successfully confronted,” Harrison said.

The hearing took place at the James R. Thompson Center, 100 W. Randolph, Chicago. It was called by State Sen. Susan Garrett of Lake Forest, Illinois.

For more information, visit [wqa.org](http://wqa.org). Testimony attached.

## **Illinois Senate Committee on Public Health Testimony**

**Joseph Harrison  
Technical Director  
Water Quality Association  
Committee on Public Health**

**September 9, 2008**

My name is Joseph Harrison. I have been the Technical Director for the Water Quality Association since 1990. Before that, for seventeen years, I served as Chief of the Safe Drinking Water Branch for Region V of the U.S. Environmental Protection Agency. My responsibilities with the EPA included the overview and enforcement of drinking water standards in the Midwest and the protection of underground sources of drinking water in the region.

I am a registered professional engineer and hold the title of Certified Water Specialist VI in the Water Quality Association's certification program. I have a degree in Civil Engineering from Wisconsin State University and hold both a Master of Science Degree in Water Resources Management and a Master of Science Degree in Environmental Engineering, from University of Wisconsin, Madison.

Let me just say a few words about the Water Quality Association. WQA is a not-for-profit industry alliance of water treatment companies. We represent more than 2,500 businesses that develop, manufacture and sell drinking water treatment equipment, mainly for home use.

While we are involved with government relations and networking among our members, one of our largest missions is research and accreditation. At our international headquarters, located in Lisle, Illinois, we operate a laboratory that certifies equipment, using independent, nationally recognized testing standards – standards authorized by ANSI, the American National Standards Institute. We also operate an education program that certifies professionals for installation and maintenance of equipment.

As a result, we have a team of trained staff who are expert on the detection and removal of contaminants. We also are always very mindful that one of our most important assets is our credibility. As an organization that certifies products and educates professionals, there is nothing more valuable than our reputation for independence and prudence. We are not, in other words, in the business of alarmism. Our association is always careful to assert only what can be backed up by scientific data.

I want to offer a balanced analysis of pharmaceuticals in our drinking water. The issue of treating pharmaceuticals is not a simple one, but there are some facts we do know.

First, as this hearing demonstrates, the public is aware of the issue and is concerned.

After the initial news reports about drugs in drinking water appeared, WQA commissioned a scientific random sample survey of the American public. The survey found that 45 percent of respondents feel very concerned and 23 percent somewhat concerned about pharmaceuticals in their drinking water. More than 80 percent were aware of news reports on the issue.

The news reports increased consumer unease generally about water quality. WQA conducted an earlier survey, in January, before the reports, and we found then 55 percent of Americans were "generally concerned" about the quality of their household water supply. When the same question was asked after news of pharmaceuticals appeared, the number of generally concerned jumped to 67 percent. Similarly, in January Americans believed by 48 to 41 percent that their drinking water is "as safe as it should be." In the March poll only 39 percent believed this, a fall-off of nearly ten percent.

Responding to this concern, a number of communities went into the field and tested their drinking water. Here in Illinois, the Chicago Tribune in April hired an independent laboratory and found trace concentrations of an anti-

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seizure drug and other chemicals. Similar findings have been reported in Arizona and the Washington DC area, among other localities.

At the same time, the Associated Press reports that the public is rarely told when researchers find pharmaceuticals in their drinking water. We certainly urge elected leaders and public officials to make information known to people so they can decide for themselves the best way to react

It is reasonable to next ask: Is the public's concern justified?

According to Utah State University Extension, up to 90 percent of oral drugs can pass through humans unchanged. These often then move through wastewater into streams, into groundwater, and into sources of drinking water.

But simply put, no one knows what the effect of these drugs might be. Clearly, we are talking about trace amounts. But even at the part per trillion level, we can compute that each drop of water contains literally millions of molecules of these chemical compounds.

The Wall Street Journal summarized the issue on August 19th, writing: "The actual health effects of drugs in the water are unclear ... Many medical experts argue that more studies need to be done -- and note that the amount of drugs in the water matters less than who drinks it. Some drugs, even in small amounts, can be especially harmful to infants, pregnant women or those with chronic health conditions, for example."

WQA has certainly heard from many consumers and our member businesses, asking our advice.

One of the initial realities for people to understand is that utilities are not designed to deal with trace amounts of these pharmaceutical and endocrine disrupting substances. They don't use and can't afford to use the highest technologies available for treating drinking and cooking water. It is generally cost prohibitive for utilities to use systems such as nano-filtration, long contact activated carbon, and reverse osmosis, which could provide effective treatment. This is perfectly reasonable, given the fact that only about one percent of the water going through our pipes actually ends up in our stomachs.

We can say confidently that filtering systems in the home do provide the highest protection available for treatment of drinking water. These "point-of-use" systems are the most cost-effective and environmentally friendly way to address emerging contaminants.

The Colorado School of Mines, at full-scale facilities in Arizona and California, conducted independent studies. They found that nano-filtration and reverse osmosis systems removed the drugs tested. Activated carbon, distillation, ozonation, advanced oxidization, and specialty media absorption filters have likewise shown promise in removing many of these contaminants.

Consumers seem to understand the reality that "point-of-use" can be the most effective place to treat drinking water.

In our scientific survey, the percentage of those stating that the primary responsibility for safe drinking water lies in the home appeared to increase after the initial news reports about pharmaceuticals. In January, respondents stated by a 52 percent margin that primary responsibility lies outside the home with their municipality, as opposed to inside the home with water treatment products. In the current survey, that margin is reduced to 44 percent. Seventy percent said they believe that home filtration plays a role, along with their municipality, in ensuring safe drinking water.

It should be noted that specific product performance standards have not yet been established for pharmaceuticals by the American National Standards Institute or similar standards accrediting organizations. WQA and WQA member companies are currently involved in a task force with NSF International to develop such standards and product test protocols. However even so, many point-of-use technologies – that is, treatment devices available today and found at the tap – have proven effective for these so-called "emerging contaminants."

WQA believes that through testing, the development of independent standards, and consumer education, concerns about pharmaceuticals in the water can be successfully confronted.

Thank you for the opportunity to testify about this important issue.