# DuPage Water Commission and Lead

Twenty five years ago the U.S Environmental Protection Agency (USEPA) published the Lead and Copper Rule (LCR) to control lead and copper in drinking water. The reason for the rule is that lead and copper negatively affect our health that much is clear. What is not widely understood outside of the water treatment and regulatory communities is that the LCR's action level is not a health-based limit but rather a trigger for water providers to implement treatment options which include water quality practices that help stabilize the water and prevent a corrosive environment. The LCR was developed to protect the end users, but the simple fact is that as long as there are lead pipes in the ground or lead plumbing in the home, some risk remains.

In light of the recent incidents in Flint Michigan, lead in drinking water has risen to the front page of every newspaper and the top story for every local news station. These stories have caused our customers to questions the safety of the water we supply on a daily basis. Our job is to reassure our customers that the water we supply is safe to drink and that we are diligently monitoring the water quality from the time it leaves our plant to the time it reaches their home.

The source water for the DuPage Water Commission is Lake Michigan, which doesn't contain any detectable lead. As the water passes through the James W. Jardine Treatment plant and flows through the City's tunnel system on its journey to DuPage County, the water does not pick up any detectable concentration of lead. The DuPage Water Commission facilities were constructed well after the use of lead was eliminated in 1986. This adds to the safeguard that the water has no contact with any source of lead on its journey from Lake Michigan to your community.

The City of Chicago routinely tests the source water and the water in their transmission system for lead and a variety of other possible contaminates in addition to their LCR required sampling of their distribution system. The Water Commission has recently started an additional testing program to verify the absence of lead and any other common contaminates in the water system. *(Test reports are attached)*

Sources of lead in drinking water are primarily from materials and components associated with service lines and home plumbing. Water suppliers are responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. If you have a question about the materials used to supply water to your home, please contact your local water utility supplier.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at:

***http://www.epa.gov/lead***

***http://extension.psu.edu/natural-resources/water/drinking-water/water-testing/pollutants/lead-in-drinking-water***

***http://www.awwa.org/lead***

There has been a call to remove all lead from the nation's drinking water systems and this will be a huge challenge for our industry, but before we address this task there are other solutions we should be addressing:

- Develop a communication plan to explain to your customers the risks of lead in drinking water
- Explain what your utility is doing to manage the risks associated with lead in drinking water
- Educate your customers on how they can protect themselves from lead in drinking water
- Develop a plan to locate and track the lead service lines in your system
- Develop a strategy and timeline to eventually replace the lead service lines in your system

The most baffling question in solving this lead challenge is who will pay? The proposed concept of cost sharing between the utility and the customers is currently being debated and there are no simple answers on the horizon. In the interim the best you can do is keep your customers informed and make some of the following suggestions:

- **Have your water tested:** Request a test from your local utility or check the Illinois Environmental Protection Agency
- **Be aware of work that can disturb the service line:** Construction, water main replacement or service line repair can loosen up lead, contaminating the water flowing into the house.
- **Run water before use:** Especially important if the home's water has not been used for several hours. The time varies based on the length of the lead service line. Five minutes will considerably reduce the amount of lead.
- **Use only cold water** for drinking, cooking and preparing baby formula.
- **Purchase a water filter:** Make sure it is certified to remove "total lead."
- **Replace the entire lead service line.**
- **Change faucet screens:** Routinely clean screens at the tip of the faucet, where sediment and metals can collect. The components should unscrew easily.

Frequently Asked Questions

**Q: How often do water systems have to test for lead?**
A: Systems must test every six months until they have achieved compliance and can qualify for a reduced sampling program. Systems that serve more than 50,000 customers can test annually as soon as two consecutive testing periods are below the level that requires federal action. Smaller systems that meet that standard can test every three years.

**Q: How do cities decide which homes to test and how are samples collected?**

A: Water systems are supposed to collect samples from buildings that are at highest risk of lead contamination. Homeowners are recruited to voluntarily collect the samples, which must be drawn from a tap that has not been used for at least six hours.

**Q: How many samples are collected?**

A: It depends on a system's size and whether it is on a reduced-sampling program. The number can vary from 100 samples for the largest water districts to five for the smallest.

**Q: What is the threshold for the EPA considering a water system in violation?**

A: A system is considered out of compliance if more than 10 percent of the sites sampled have lead levels above the federal-action level of 15 parts per billion.

**Q: What happens then?**

A: Within 60 days, the system must notify customers about the test results and inform them of the possible health risks and outline steps they can take to protect themselves. Those suggestions often include running water for 30 seconds to flush lead, using cold water for cooking and making baby formula, and replacing lead-based plumbing fixtures and service lines. Buying water filters and bottled water also are options.

**Q: Are the water systems required to do anything else?**

A: Yes. Typically, they are required to study and eventually add corrosion-control treatments to the water supply. Often, systems use a chemical such as phosphate to make the water less corrosive and therefore less likely to leach lead from service lines and plumbing fixtures. They may also be required to replace some lead service lines, which connect water mains to individual homes.

**Q: Do all schools and day care centers have to test for lead?**

A: No. In fact, most schools are not required to do testing under the rule. Only schools and day care centers that operate their own water systems are required to test for lead. Public and private schools and day care facilities that rely on a municipal water system are not required to test, although some do in the interest of safety.

**Q: How do I know if my house might have lead in the water?**

A: Just because your community is over or under the federal limit does not mean the drinking water at your house is safe or unsafe. The best way to know might be to call your water supplier to have it tested for lead, a service that many are now offering for free.

**Q: Why don’t more water systems replace their old lead pipes?**

A: The cost, along with some questions about ownership. Many water systems have replaced or are in the process of replacing all of the lead-based water lines they own. But millions of miles of service lines deliver water to old homes, schools and businesses, and often cost $3,000 to $7,000 per location to replace. Property owners are generally responsible for those pipes.