



Wayland Department of Public Works - Water Division

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Lead and Copper Statement

Is the WWD monitoring for lead and copper in our drinking water?

In 1991, the EPA published a regulation to control lead and copper in drinking water. This regulation is known as the Lead and Copper Rule (also referred to as the LCR). The rule requires water systems to monitor drinking water at customer taps for the presence of Lead and Copper. If Lead and Copper concentrations exceed the action level (0.015 mg/L for Lead or 1.3 mg/L for Copper) in more than 10% of customer taps sampled, the water system must undertake a number of additional actions to control corrosion. As of the date of this statement, none of our water sources have tested positive for Lead content. In 2014 the Water Division was granted a 3 year reduced sampling schedule for Lead and Copper by MassDEP. The monitoring waiver allows the Water Division to sample every 3 years for Lead and Copper. The waiver was granted due to the fact that we had not exceeded the Lead or Copper Action level in the previous several sampling rounds.

Background on Flint

Recently, the situation in Flint Michigan has been dominating national headlines focusing on excessive levels of lead discovered in their drinking water. As part of the federal response, the EPA has established the Flint Safe Drinking Water Task Force and a website <http://www.epa.gov/flint> to assist in the crisis, work with local authorities, and inform the public. While the media has much to say on this subject, it can become difficult to separate fact from fiction. It is important to the Wayland Water Division that we keep our customers informed on how this crisis pertains to our community and make you aware of what we are doing to continue to provide safe drinking water to our customers.

The crisis in Flint was caused by two fundamental conditions:

- A change in drinking water source from Lake Huron to the Flint River
- A lack of proper corrosion control methods after switching to the new source. When a drinking water source is determined to be corrosive, the EPA (and in Massachusetts, our Local DEP) requires water systems to apply corrosion control treatment to stabilize the water before it is distributed to customers. If not controlled, the corrosive water may cause lead used in older plumbing systems to be released and introduced into the drinking water.

Does this Situation Apply to Wayland?

Your Drinking Water Source

In Wayland, our sole drinking water source is groundwater from the Sudbury, Assabet, and Concord River Basin - a deep underground aquifer protected from surface water influences by a confining layer. As stated earlier, MassDEP requires that we test each source once per year for the presence of Lead and Copper along with other contaminants.

As of the date of this statement, none of our water sources have tested positive for Lead content. Copper is found naturally in our source water at very low concentrations. Our most recent round of testing in January revealed an average copper concentration in our source water of .006 mg/L (milligrams per liter). This number is well below the MassDEP Action Level of 1.3mg/L.

Corrosion Control Methods

The Wayland Water Division has been adjusting the pH of our drinking water since the early 1990's. Our source water naturally has a pH of 6.4 which is slightly corrosive. We chemically adjust the water so it has a pH of at least 7.3 which is just above neutral. This prevents corrosion of water distribution mains and household plumbing. The Lead and Copper Rule is a tool that we use to gauge the effectiveness of our Corrosion Control Program.

Lead Water Services and Lead Plumbing Solder

The Wayland Water Division was established in 1878, well before the time when rubber gaskets were invented to seal joints in water distribution mains. From 1878 to the mid 1950's, lead was used in the construction of our water distribution mains to connect the underground water mains together. We are in the final stages of completing a study that will outline the replacement of our ageing infrastructure.

According to our records, full length lead water services were never used in Wayland. The most common type of water service that was used pre 1950 was iron pipe. Iron pipe is ridged, so a flexible connection was needed to make the short connection to the water main in the street. Typically iron pipe was connected to the water main in the street by a short 2 foot piece of lead water pipe made for this application. This short connection was known as a "lead link" or a "lead gooseneck". Our records indicate that in the mid 1980's all known "Lead Links" were replaced with plastic due to pipe failures or the proposed EPA LCR legislation. Since the issue arose in Flint, we are in the process of compiling a list of every water service record that was installed pre 1950. This list will be investigated in the upcoming months to verify that the lead links were removed from the water system. If any are found, affected residents will be notified and a replacement plan will be drafted.

Lead solder was commonly used in home construction until 1986. As part of the Lead and Copper testing program, the Wayland Water Division has identified all homes built within our service area prior to that time. Residential sampling is routinely performed at sites randomly selected from those locations and approved by the Massachusetts Department of Environmental Protection (MassDEP). Should sampling indicate an exceedance at a customer's home, the Water Division is required by law to provide notice to the affected resident.

Conclusion

The Wayland Water Division is monitoring our water supply for Lead and Copper as required by state and federal regulations. We report our findings annually in our Water Quality Report http://www.wayland.ma.us/Pages/WaylandMA_Water/2014%20Consumer%20Confidence%20Report.pdf . In the coming months, we hope to provide our customers with an electronic database of all water testing conducted in Town.

If you have any questions, please contact the Water Division at 508-358-3674.