To ensure continued transparency as we work to restore safe drinking water for all residents in University Park, Aqua Illinois is sharing its sampling results on WaterFactsIL.com on a weekly basis to keep the community and other stakeholders informed on our progress.

Explaining compliance samples

The U.S. Environmental Protection Agency, through its lead and copper rule, requires water utilities to work with their customers to collect regularly scheduled stagnation samples, or compliance samples. These are samples of water that has remained in customers' pipes for six or more hours. Water that sits in pipes unused for six or more hours provides worst-case scenario data for lead exposure. The U.S. EPA deems water treatment effective when water can remain in pipes for six or more hours and still meet U.S. EPA standards, less than 15 micrograms per liter (ug/L) across 90 percent of sample locations. Utilities must choose locations to sample with highest possible inventory of lead– for example, Tier 1 locations are those with lead service lines. The lead and copper rule does not set a health-based lead limit. It is a treatment-based rule. That means if 90 percent of compliance samples are less than 15 ug/L, treatment is deemed effective, and any samples over 15 ug/L are analyzed on an individual basis. Do not consume advisories can be issued to be proactively protective.

To complete compliance sampling, Aqua Illinois provides bottles and instructions to participating customers, who then collect the samples. We pick up the compliance samples when customers tell us the samples are ready, and then we send them to an independent lab for testing.

Weekly sampling

Currently, the Illinois Environmental Protection Agency requires Aqua Illinois to work with at least 40 homes and businesses in the University Park, Green Garden and Monee Township service area to conduct compliance sampling on a biannual basis. Aqua Illinois selects compliance sample sites that are representative of worst-case exposure lead sites. The IEPA must approve all compliance sample sites before Aqua Illinois begins testing.
We collected samples in May 2019 as part of our biannual compliance testing schedule. On June 13, 2019, we began receiving those sampling results, some of which showed elevated lead levels. As a result, Aqua Illinois began working with the IEPA on a treatment plan, which includes conducting weekly compliance sampling as we resolve this issue.

We are committed to being fully transparent throughout our treatment process, and we will share these results on a weekly basis at WaterFactsIL.com until we resolve this issue.

How we're fixing it

We issued a do not consume advisory June 14, 2019 for all customers in the service area after receiving some compliance samples that showed elevated lead levels on June 13, 2019.

We immediately launched an investigation to identify the source of lead and resolve the issue. We found tin in our sampling results, a strong indicator that lead solder in internal plumbing was the source. The U.S. EPA banned lead solder and pipe installation in 1986, and compliance testing results in post-1986 homes showed lead levels that met the U.S. EPA standards. We have since removed some areas from the do not consume advisory based on property age. Aqua Illinois still recommends residents in areas that have been lifted from the do not consume advisory flush their systems for two minutes before consuming tap water. (Click here for more details on how flushing your system affects lead levels in your water.)

On June 15, 2019, Aqua Illinois introduced a new treatment, orthophosphate, into the water system in the entire service area. This treatment is known for its ability to create a protective coating where lead is present, keeping it out of the water we consume. The treatment can take up to a few weeks or longer to become effective.

Please visit WaterFactsIL.com for the most up-to-date information.

A message from the IEPA

The Centers for Disease Control and Prevention indicate there is no safe blood lead level in children. Lead exposures come from a combination of environmental sources, which may include lead in water. The U.S. EPA estimates that water can make up 20 percent or more of a person's total exposure to lead, and infants who consume mostly mixed formula can receive 40-60 percent of their exposure to lead from drinking water. The source of lead in water is most often a building's plumbing system.

The IEPA and the Illinois Department of Public Health support point-of-use (POU) filters as a short-term strategy for reducing lead in drinking water. (*Please note: Aqua Illinois is providing free faucet filters and pitcher filters to customers in University Park*). A POU system filters water at the point where water is being used and is installed at the water connection, typically under the sink in the kitchen or bathroom. Water pitchers with POU filters may also be used. POU filters are commercially available and can be effective at removing most lead. There are several POU cartridge filter units on the market. They can vary in price and effectiveness. Filters should routinely

be replaced or maintained in accordance with manufacturers guidelines and recommendations to remain effective.

To select a lead-reducing POU filter, check with the manufacturer or a third-party website (such as www.nsf.org) to verify the product was tested and certified for lead removal (NSF/ANSI Standard 53). For additional protection for particulate lead, look for a POU filter that is also certified against NSF/ANSI Standard 42 (for class I particulate reduction, 0.5 micrometers to less than 1 micrometers). To be effective, the POU filters should be installed at locations used for drinking water or for food preparation according to the manufacturer's instructions. This includes kitchen water faucets and refrigerators with water dispensers and ice makers or in water pitchers. POU filters should be considered an interim measure until the sources of lead have been removed and replaced with lead-free plumbing materials. After replacement of lead plumbing materials or disturbance of a plumbing system, the plumbing system should be flushed for 30 minutes with aerators and screens removed from all faucets. Because you cannot see, smell, or taste lead in water, testing the water is the only way to determine if lead is present in drinking water.

To access additional information about lead in drinking water and a consumer tool for identifying POU filters certified to reduce lead, please visit U.S. EPA's website at https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water and https://www.epa.gov/water-research/consumer-tool-identifying-pou-drinking-water-filters-certified-reduce-lead.

Lead in homes can also come from sources other than water. To access more information about other sources of lead, please visit IDPH's website at: http://www.dph.illinois.gov/illinoislead. Consider contacting your doctor to have your children tested if you are concerned about lead exposure.

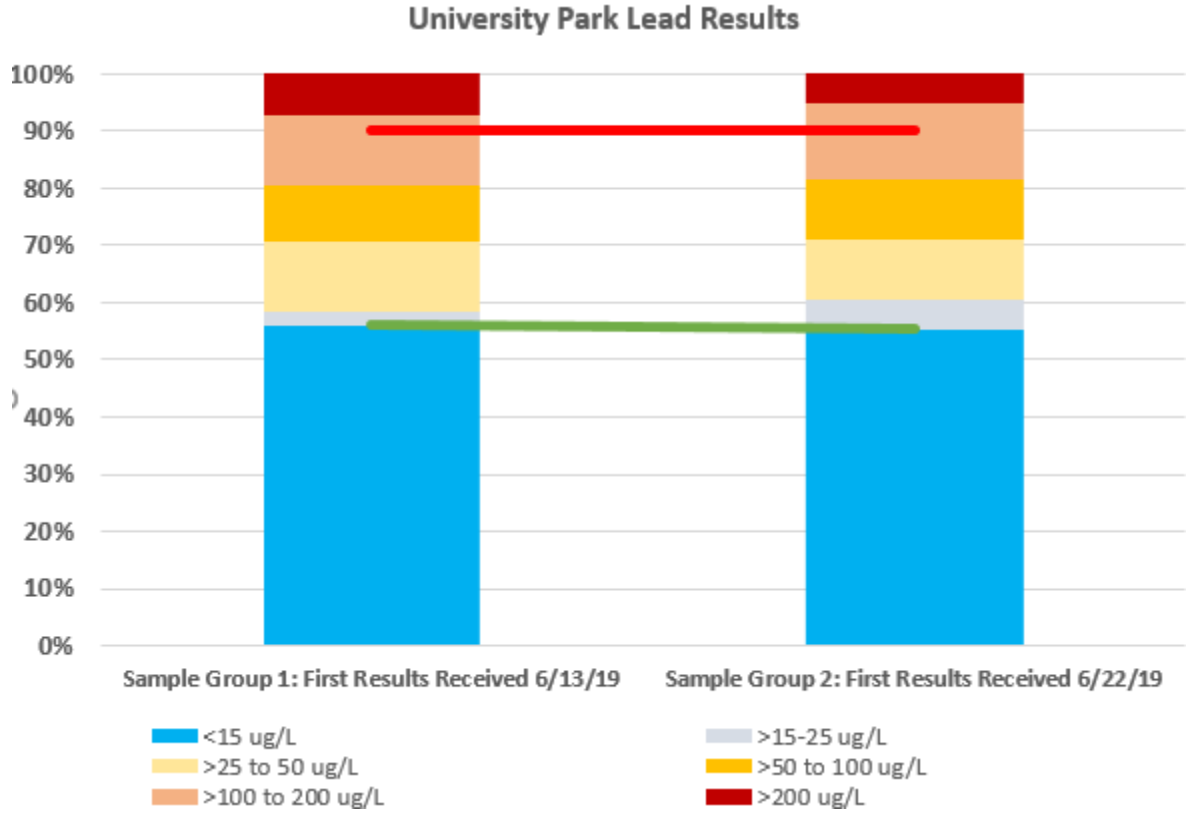
First data explanation:
This weekly data update measures the change in lead levels in water after three days of the new treatment. The weekly data update includes two sample groups. Sample Group 1 represents the original samples sites where customers collected samples in May 2019, which Aqua received June 13, 2019. Sample Group 2 represents many of the same sample sites after three days of the new treatment.
Please note that the specific number of sites listed may differ from week to week because we receive customer samples and results from the independent labs on different days.
Please know that establishing effective corrosion treatment can take at least a few weeks to take effect. Three days of treatment is a short window for understanding the treatment's overall effectiveness. Despite that, after three days under new treatment, some preliminary observations of the data are:

- The maximum level of lead found in the sample set decreased by 64 percent
- The average level of lead found in the sample set decreased by 37 percent
- The 90-percentile level of lead remained essentially the same
- More than half the samples are less than 15 ug/L
- After investigating the property with the maximum of 1,700 ug/L from Sample Group 1, the aerator was cleaned, and the Sample Group 2 result decreased by 64 percent to 77 ug/L

Sampling Results for Lead in University Park

Sampling results below are provided from samples collected by customers at approximately 40 homes and businesses in the University Park area. These locations were identified by Aqua and approved by the Illinois Environmental Protection Agency as official test sites. Samples are collected after the water sat in plumbing pipes for more than 6 hours to represent a worst-case scenario.

The EPA standard states that 90% of the sample results should be below a lead concentration of 15 micrograms per liter (ug/L) in drinking water.



Lead Sampling Results for University Park Sampling Events

The table below represents lead sampling results from Sample Group 1 collected in May 2019 as part of our biannual required sampling, and subsequent sample groups. We are now conducting weekly testing because of the lead issue. As we receive additional weekly sample results, we will add them to the table. Please note, not all results may be available in the table below for each sample group, because we may receive samples back from customers or results from the lab on different days. The table will be updated weekly and will include results as they become available. To maintain privacy of individual owners, we have identified each sample with a Home ID rather than actual street address.

		LEAD CONCENTRATION (ug/L)	
Home ID	Year Built	Sample Group 1: First Results Received 6/13/19	Sample Group 2: First Results Received 6/22/19
1	1970	110	150
2	1970	<1.0	*
3	1970	1.3	1.3
4	1970	<1.0	4.1
5	1970	1.3	<1.0
6	1970	<1.0	<1.0
7	1970	66	620
8	1970	14	2.5
9	1970	<1.0	<1.0
10	1970	92	480
11	1972	<1.0	1.4
12	1972	<1.0	<1.0
13	1973	23	19
14	1973	31	38
15	1973	3.5	5.1
16	1973	670	140
17	1973	170	25
18	1973	140	160
19	1974	280	130

		LEAD CONCENTRATION (ug/L)	
Home ID	**Year Built**	**Sample Group 1: First Results Received 6/13/19**	**Sample Group 2: First Results Received 6/22/19**
20	1974	88	35
21	1975	110	62
22	1975	2.8	*
23	1975	46	42
24	1975	180	130
25	1975	7.9	<1.0
26	1975	6.2	<1.0
27	1975	66	44
28	1975	41	3.2
29	1975	29	51
30	1975	1.0	<1.0
31	1975	9.7	9.2
32	1975	35	54
33	1975	1700	77
34	1979	1.9	<1.0
35	1990	<1.0	1.3
36	1996	<1.0	<1.0
37	1998	1.7	<1.0
38	2002	<1.0	<1.0
39	2006	<1.0	*
40	2008	<1.0	<1.0
41	NA	<1.0	1.1

* Property did not return sample

	Parameter	Sample Group 1: First Results Received 6/13/19	Sample Group 2: First Results Received 6/22/19
Concentration Statistics in ug/L	Minimum	<1.0	<1.0
	Maximum	1700	620
	Average	96.1	60.5
	Median	7.9	4.6
	Sample Count	41	38