2020 Data Updates

On Jan. 1, 2020, we began a new six-month compliance sampling monitoring period in University Park. Compliance samples allow us to measure lead levels in water that has sat stagnant in customers' pipes for six or more hours and is therefore at a higher risk for lead exposure.

In January, we collected 58 compliance samples from University Park homes and businesses – well above the 40 required by regulation for the entire six-month period – so we could better understand the chemistry in customers' pipes and track our treatment's progress.

Moving forward, on an ongoing monthly basis, we will collect additional compliance samples from homes within our existing sampling pool. To keep the public and other stakeholders informed of our progress, all results will be shared on this page by the 10th of each month.

Customers can call 877.987.2782 at any time to request water sampling.

06/10/2020 Update

In agreement with the State, water sampling in University Park was suspended in April due to COVID-19 and medical and government recommendations. With safety measures in place, we resumed water sampling in May while adhering to public health guidelines.

May 2020 Data Update

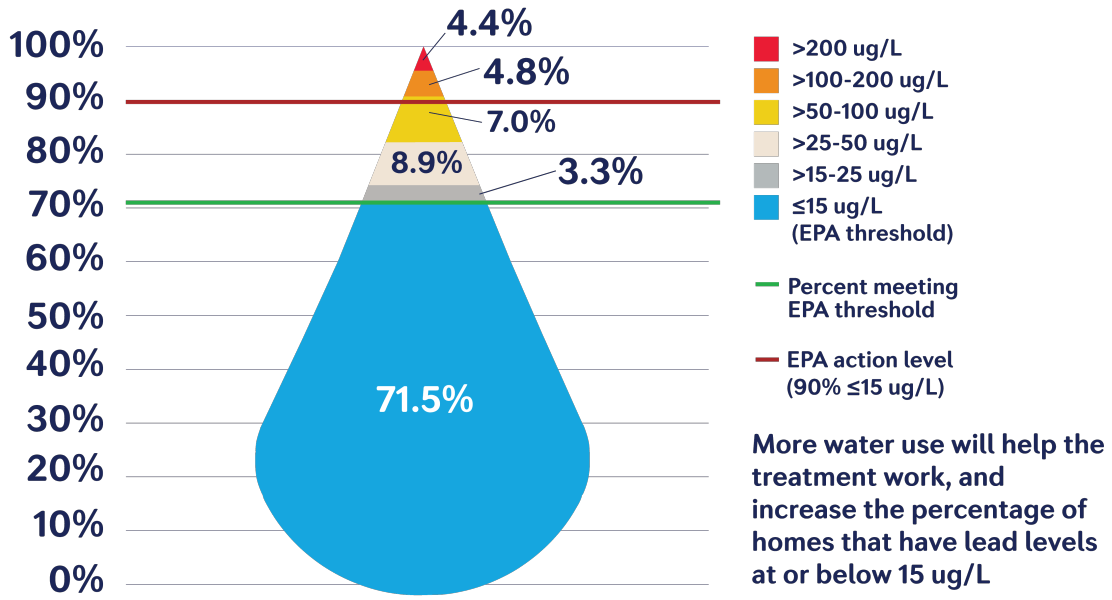
06/10/2020

Overall water quality in University Park has improved, but data continue to show that it is critical that impacted customers regularly use their water to fully resolve this situation.

About 72 percent of all compliance-sampled homes are at or below the Environmental Protection Agency's threshold for lead, 15 micrograms per liter (ug/L), as of May 2020. Given that sampling was suspended due to COVID-19, it is important to note that this is up from about 62 percent in March 2020.

About 72 percent of compliance samples are at or below the EPA threshold for lead in water

Compliance samples, by ug/L, collected from University Park homes and businesses, January-May 2020



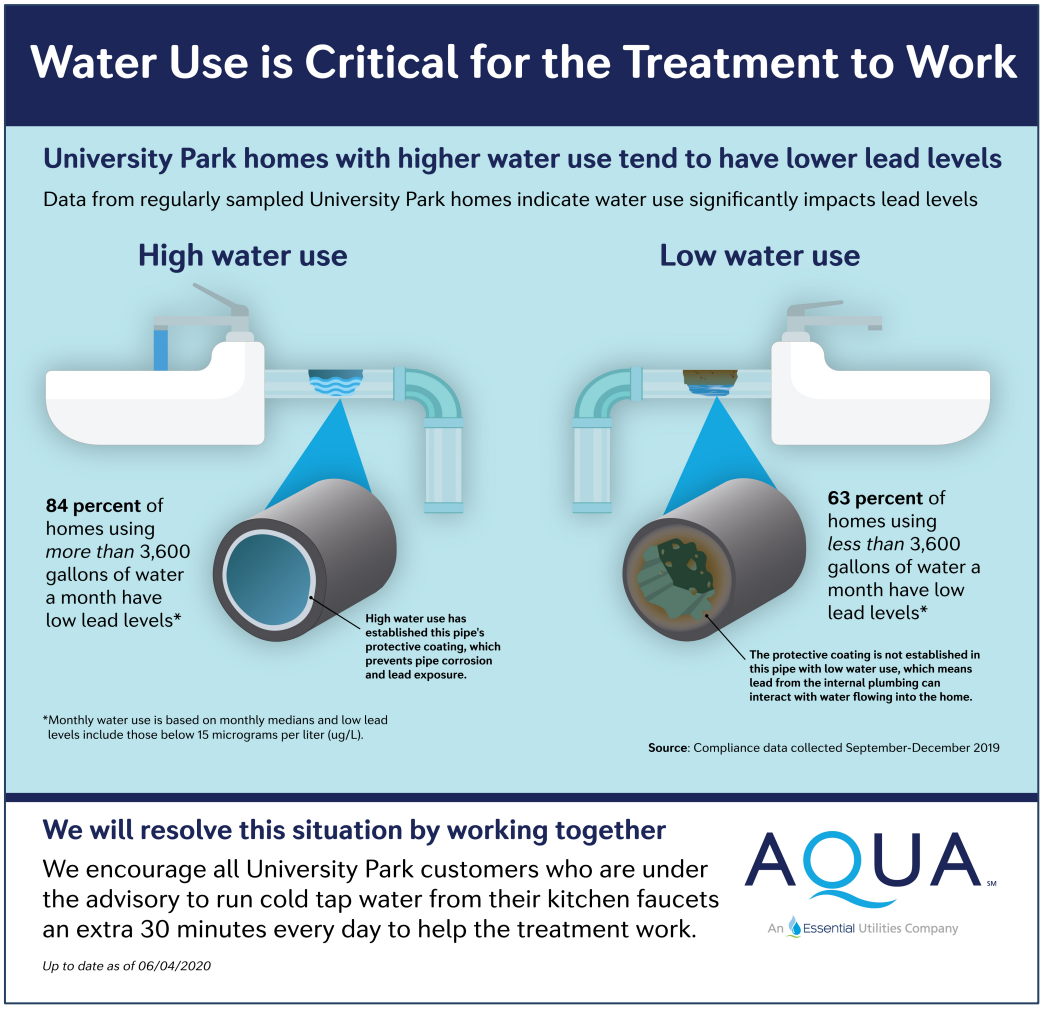
According to the EPA's Lead and Copper Rule that regulates drinking water, the treatment is considered effective when 90 percent of sample locations meet the EPA threshold.

The data demonstrate that overall lead levels have improved, but elevated lead levels remain in some homes. Lead concentrations continue to show some

variability, which is to be expected as the piping continues to adjust to the treatment.

To view a table listing all compliance sample results for each sampled home from January-May sampling events, please see Appendix A at the end of this document.

To help resolve this situation, customers under the advisory should run cold tap water from their kitchen faucets an extra 30 minutes every day, in addition to their regular water use. This will allow us to work together toward the solution and speed up the treatment process.



As illustrated above, using tap water moves the treatment through the system so it can establish a protective layer inside customers' home plumbing. The protective layer will stop lead inside customers' internal plumbing from interacting with water flowing into their homes.

In the same way that painting a room at home sometimes requires several coats of paint, the treatment requires more water flow to fully coat the home's pipes.

By the end of 2019, 100 percent of samples that were collected from University Park homes after running the tap water for two to three minutes had nearly non-detectable lead levels. This validates that, in addition to helping the treatment work, running the tap water is highly effective at reducing potential lead exposure.

We thank our customers for their continued patience and cooperation.

See below for more information about compliance sampling and our process or click here to view previous 2020 data updates or here to view 2019 data updates.

More Information About Compliance Sampling

The Lead and Copper Rule and Compliance Sampling Requirements

The EPA, through its Lead and Copper Rule, requires water utilities to work with their customers to collect regularly scheduled stagnation samples, or compliance samples. These samples must be taken after water has remained in customers' pipes unused for six or more hours, therein providing high-case scenario data for lead exposure. Under the rule, utilities must choose sample locations that represent properties with the highest inventory of lead. For example, so-called "Tier 1" locations include those with lead service lines or lead solder on copper pipes within homes constructed after 1982.

The Lead and Copper Rule does not set a health-based lead limit; it is a treatment-based rule, which means if 90 percent of compliance samples test below 15 ug/L, treatment is deemed effective, and any samples with lead levels above 15 ug/L are analyzed on an individual basis.

Compliance Sampling in University Park

IEPA regulations require us to work with at least 40 homes and businesses in the University Park service area to conduct compliance sampling. Regulations require us to conduct sampling twice annually. Sample locations must be submitted to the IEPA before compliance sampling can begin.

We collected regularly scheduled 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, we began working with the IEPA on a treatment plan and voluntarily increased the sampling frequency, which now includes conducting monthly sampling, to help us understand and monitor progress as we resolve this issue.

All sample locations in the sampling pool were built before 1990, which means they likely have lead in their internal plumbing and represent "high-case" scenarios.

To complete compliance sampling, we schedule appointments with participating customers and a member of our team collects the samples after customers' water has been unused for six or more hours. We then send the samples to an independent lab for testing.

What we Believe Happened and how we are Working to Fix it

We immediately issued a voluntary do-not-consume advisory on June 14, 2019 for all customers in the service area **to be as protective as possible** after receiving compliance samples that showed elevated lead levels in 14 homes on June 13, 2019. Thereafter, we investigated and gathered information about this situation. It is important to note that no state or federal regulation required us to issue the do-not-consume advisory and that we issued it as a precaution to protect the public until we learned more about the extent, cause and level of the issue AND until we could implement alternative protective health measures. We have since transitioned to a lead advisory to provide more useful guidance to customers. We are continuing our public education efforts, so impacted customers know the protective steps to take to consume their water.

We have identified that the likely cause of elevated lead levels is due to water chemistry interacting with lead solder in customers' internal plumbing. Our information shows that the water in our distribution system and the University Park infrastructure do not have elevated levels of lead.

The EPA banned lead solder in 1986, and compliance testing results in post-1990 University Park homes have shown lead levels meet the EPA action level. We have since removed some areas from the advisory based on property age and water sample results. While not *required*, we still recommend customers whose properties have been lifted from the advisory run their tap water for two to three minutes and until they notice a temperature change before consumption. This ensures they receive fresh water from the mains in the street rather than water that has been sitting stagnant in their internal plumbing.

On June 15, 2019, we introduced a new treatment, orthophosphate (or, more specifically, a 90/10 phosphate blend), 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 the lead out of the water we consume. The treatment can take months to become effective. It is important to note that this treatment is not harmful to humans or pets.

A Message from the IEPA

The Centers for Disease Control and Prevention indicates there is no safe blood lead level in children. Lead exposures come from a combination of environmental sources, which may include lead in water. 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 from a building's plumbing system.

The IEPA and 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 [effective treatment is restored, or] 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.

Appendix A:

Compliance sample results, by ug/L, January-May 2020

Samples	Home ID	ug/L
1	3	<1.0
2	5	<1.0
3	6	<1.0
4	7	1.1
5	9	2.5
6	10	5.4
7	11	1.9
8	12	<1.0
9	13	<1.0
10	16	16
11	17	100
12	19	28
13	23	23
14	25	6.8
15	26	<1.0
16	27	4.6
17	28	4.7
18	29	35
19	31	<1.0
20	32	110
21	33	2700
22	34	1.5
23	43	<1.0
24	45	6.6
25	48	<1.0
26	53	98
27	54	350
28	55	140
29	56	2.5

30	57	65
31	58	8.1
32	60	<1.0
33	61	36
34	62	<1.0
35	63	4.5
36	65	<1.0
37	66	2.5
38	68	9.6
39	70	35
40	71	78
41	72	370
42	73	8.3
43	74	<1.0
44	75	3.4
45	76	5.5
46	77	3.2
47	78	<1.0
48	79	<1.0
49	80	1.4
50	81	22
51	82	2
52	84	<1.0
53	85	29
54	86	130
55	89	4.1
56	90	1100
57	91	75
58	92	180
59	6	2.6
60	17	38
61	21	270
62	23	160
63	31	12

64	53	6.2
65	58	7.3
66	74	<1.0
67	77	19
68	92	690
69	7	10
70	10	9.4
71	13	<1.0
72	16	43
73	66	2.2
74	82	89
75	4	<1.0
76	5	<1.0
77	6	<1.0
78	7	2.2
79	8	1.3
80	9	<1.0
81	10	4.9
82	11	<1.0
83	12	<1.0
84	13	<1.0
85	14	<1.0
86	15	3.9
87	16	49
88	17	<1.0
89	20	4.4
90	23	8.2
91	27	<1.0
92	28	75
93	29	34
94	30	<1.0
95	31	4.3
96	32	11
97	33	180

98	34	<1.0
99	43	<1.0
100	44	42
101	45	<1.0
102	47	<1.0
103	48	<1.0
104	50	<1.0
105	51	<1.0
106	53	10
107	54	13
108	55	43
109	56	<1.0
110	57	81
111	58	11
112	60	<1.0
113	61	78
114	62	1.8
115	63	5.5
116	64	6.4
117	65	<1.0
118	66	<1.0
119	67	1.9
120	68	1.4
121	69	<1.0
122	70	<1.0
123	72	5.7
124	73	5.2
125	74	<1.0
126	75	11
127	77	3.5
128	78	<1.0
129	79	<1.0
130	80	5.9
131	81	18

132	82	1.2
133	84	<1.0
134	85	4.5
135	86	<1.0
136	87	3.3
137	90	7.6
138	91	1.5
139	92	1100
140	94	<1.0
141	4	<1.0
142	5	<1.0
143	6	<1.0
144	7	<1.0
145	8	<1.0
146	9	<1.0
147	10	<1.0
148	11	<1.0
149	12	<1.0
150	13	3.1
151	15	<1.0
152	16	110
153	17	<1.0
154	20	11
155	21	<1.0
156	23	5.3
157	27	15
158	28	88
159	29	91
160	30	<1.0
161	31	89
162	33	1100
163	34	<1.0
164	43	<1.0
165	44	31

166	45	<1.0
167	47	<1.0
168	48	<1.0
169	50	35
170	51	9.7
171	53	3.6
172	54	1.7
173	55	43
174	56	26
175	57	82
176	58	16
177	60	<1.0
178	61	56
179	62	<1.0
180	63	1.8
181	64	4.9
182	65	5
183	66	<1.0
184	67	48
185	68	<1.0
186	69	<1.0
187	70	<1.0
188	72	3.6
189	73	5.9
190	74	<1.0
191	75	14
192	77	35
193	78	<1.0
194	79	<1.0
195	80	9.2
196	81	20
197	82	1.7
198	84	<1.0
199	85	<1.0

200	86	<1.0
201	87	16
202	89	4.1
203	90	200
204	91	<1.0
205	92	2000
206	94	<1.0
207	4	<1.0
208	5	<1.0
209	6	<1.0
210	7	<1.0
211	8	7
212	9	<1.0
213	10	<1.0
214	11	<1.0
215	12	<1.0
216	13	1.8
217	16	77
218	20	30
219	21	<1.0
220	23	4.2
221	27	330
222	28	110
223	29	170
224	30	<1.0
225	31	10
226	32	34
227	33	310
228	42	<1.0
229	42	<1.0
230	43	<1.0
231	44	180
232	45	1.4
233	47	<1.0

234	48	1.3
235	50	93
236	53	24
237	54	8
238	55	110
239	56	1.4
240	57	100
241	58	6.7
242	60	<1.0
243	61	100
244	62	<1.0
245	63	120
246	64	6.6
247	65	54
248	66	<1.0
249	67	1.6
250	68	<1.0
251	70	<1.0
252	72	34
253	73	2.4
254	74	<1.0
255	75	37
256	76	<1.0
257	77	5.6
258	78	<1.0
259	79	5.3
260	80	14
261	81	41
262	82	5.5
263	84	2.6
264	85	33
265	86	<1.0
266	89	8.8
267	90	43

268	91	2.3
269	92	950
270	94	<1.0