POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT

Zonta House

September 21, 2016

INTRODUCTION

During the month of April, 2016, the Department of Licensing and Regulatory Affairs (DLARA) completed replacement of drinking water fixtures at Whaley Children's Center, Zonta House. These fixture replacements were required because testing results indicated that the older fixtures at most schools were imparting lead to the drinking water. After the fixtures were replaced, a more thorough flushing of the plumbing lines was completed to remove any remaining material from the building's water supply system.

On Saturday, April 30, 2016 the Department of Environmental Quality conducted a post-fixture sampling assessment of the plumbing system at the facility.

For the protection of public health, DLARA started offering the installation of filters on drinking water fixtures at daycare facilities and schools in Flint. This work began in July, 2016.

Water Main Description

An internal inspection of the water main idenfitied a three quarter inch galvinized line to the meter and three quarter inch copper throughout the home.

SAMPLING METHODS

Fixture Sampling

There are four drinking water fixtures that were identified at the facility. After a minimum six-hour stagnation period, four samples were collected at each of the fixtures identified. Two initial samples were collected immediately after turning on the tap. The water was then flushed for 30 seconds and a third sample was collected. Finally, the water was flushed for another two minutes, and the fourth sample was collected. These samples were used to determine the impact of any lead sources in and around each specific fixture and its connecting plumbing.

Deep Plumbing Sampling

A different sampling method is used to determine the impact of any lead sources located deep in the supply plumbing of the building. During this method, ten bottles are collected in a row (consecutively). These bottles are one liter in size, which is larger than those used for the fixture sampling method.

Sampling Notes

- The standard 'Fixture Sampling Method' with a minimum six-hour stagnation period was not possible for this facility due to the residents' consistent water use needs. Sampling is representative of usual water use at the facility.
- Sixteen samples from four fixtures were collected and sent to the lab for analysis.
- Ten samples were collected from one specific fixture and sent to the lab for analysis for the deeper plumbing assessment.

SAMPLING RESULTS

Post-Fixture Replacement

April 30, 2016
Of the 26 samples:

- Lead Range: Non-Detected (ND) to 4 parts per billion (ppb)
- Copper Range: ND to 170 ppb

** Where the result is non-detected for lead it means that the amount of lead in the water was less than 1 ppb.*

** Where the result is non-detected for copper it means that the amount of copper in the water was less than 50 ppb.*

Zonta House

April 30, 2016

Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	1	01BF001 SOUTH BATH	P1	Copper	120
Lead	2	01BF001 SOUTH BATH	P2	Copper	100
Lead	ND	01BF001 SOUTH BATH	F01	Copper	ND
Lead	ND	01BF001 SOUTH BATH	F02	Copper	ND
Lead	2	01KC002 KITCHEN	P1	Copper	170
Lead	3	01KC002 KITCHEN	P2	Copper	130
Lead	ND	01KC002 KITCHEN	F01	Copper	ND
Lead	ND	01KC002 KITCHEN	F02	Copper	ND
Lead	ND	01BF003 MAIN BATH	P1	Copper	90
Lead	4	01BF003 MAIN BATH	P2	Copper	70
Lead	ND	01BF003 MAIN BATH	F01	Copper	ND
Lead	ND	01BF003 MAIN BATH	F02	Copper	ND
Lead	ND	01BF004 MAIN BATH	P1	Copper	100
Lead	1	01BF004 MAIN BATH	P2	Copper	ND
Lead	ND	01BF004 MAIN BATH	F01	Copper	ND
Lead	ND	01BF004 MAIN BATH	F02	Copper	ND
Lead	ND	01KC002 KITCHEN	A1	Copper	ND
Lead	ND	01KC002 KITCHEN	A2	Copper	ND
Lead	ND	01KC002 KITCHEN	A3	Copper	ND
Lead	ND	01KC002 KITCHEN	A4	Copper	ND
Lead	ND	01KC002 KITCHEN	A5	Copper	ND
Lead	ND	01KC002 KITCHEN	A6	Copper	ND
Lead	ND	01KC002 KITCHEN	A7	Copper	ND
Lead	ND	01KC002 KITCHEN	A8	Copper	ND
Lead	ND	01KC002 KITCHEN	A9	Copper	ND
Lead	ND	01KC002 KITCHEN	A10	Copper	ND

* Non-detected (ND) means for lead the amount in water is less than 1 pbb, and for copper the amount in water is less than 50 pbb.