POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT

GCCARD Child Development Center

DEQ

September 22, 2016

INTRODUCTION

During the month of April 2016, the Department of Licensing and Regulatory Affairs (DLARA) completed replacement of drinking water fixtures at GCCARD Child Development Center. 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.

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

On Tuesday, July 26th, 2016 the Department of Environmental Quality conducted a post-fixture sampling assessment of the plumbing system at the facility.

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

- Sixteen samples from four fixtures were collected and sent to the lab for analysis.
- Ten samples from one specific fixture were collected and sent to the lab for analysis for deeper plumbing assessment.
- All aerators were inspected and cleaned. No debris was present in any of the aerators.
- All faucets have under counter thermostatic mixing valves installed for temperature control.

SAMPLING RESULTS

Post-Fixture Replacement

July 26, 2016
Of the 26 samples:

- Lead Range: Non-Detected (ND) to 5 parts per billion (ppb)
- Copper Range: ND to 240 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.*

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July 26, 2016

Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	2	001BF001	P1	Copper	150
Lead	5	001BF001	P2	Copper	170
Lead	1	001BF001	F01	Copper	120
Lead	ND	001BF001	F02	Copper	80
Lead	3	001KC002	P1	Copper	240
Lead	1	001KC002	P2	Copper	110
Lead	ND	001KC002	F01	Copper	80
Lead	ND	001KC002	F02	Copper	60
Lead	2	001BF003	P1	Copper	130
Lead	4	001BF003	P2	Copper	190
Lead	2	001BF003	F01	Copper	170
Lead	4	001BF003	F02	Copper	180
Lead	2	001BF004	P1	Copper	140
Lead	4	001BF004	P2	Copper	180
Lead	ND	001BF004	F01	Copper	120
Lead	ND	001BF004	F02	Copper	60
Lead	ND	001KC002	CA1	Copper	80
Lead	ND	001KC002	CA2	Copper	70
Lead	ND	001KC002	CA3	Copper	70
Lead	ND	001KC002	CA4	Copper	60
Lead	ND	001KC002	CA5	Copper	60
Lead	ND	001KC002	CA6	Copper	60
Lead	ND	001KC002	CA7	Copper	60
Lead	ND	001KC002	CA8	Copper	60
Lead	ND	001KC002	CA9	Copper	60
Lead	ND	001KC002	CA10	Copper	50

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.