

POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT

Lori Hill Daycare



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 Lori Hill Daycare. 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 Saturday, August 6, 2016, the Department of Environmental Quality (DEQ) conducted a post-fixture sampling assessment of the plumbing system at the facility.

Water Main Description

An inspection from inside the building yielded a three quarter inch copper main to the meter, a brass curb cock valve, and three quarter inch copper distribution through the building.

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 the deeper plumbing assessment.
- All aerators were found clean of debris during the sampling.
- The facility had the water shut off prior to DEQ staff arrival to assure that no water was used during the stagnation period.

SAMPLING RESULTS

Post-Fixture Replacement

August 6, 2016
Of the 26 samples:

- Lead Range: Non-Detected (ND) to 23 parts per billion (ppb)
- Copper Range: ND to 190 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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Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	ND	01BF001 MAIN BATH	P1	Copper	ND
Lead	ND	01BF001 MAIN BATH	P2	Copper	60
Lead	2	01BF001 MAIN BATH	F01	Copper	ND
Lead	ND	01BF001 MAIN BATH	F02	Copper	ND
Lead	2	B01BF002 BASEMENT HALF BATH	P1	Copper	140
Lead	2	B01BF002 BASEMENT HALF BATH	P2	Copper	190
Lead	16	B01BF002 BASEMENT HALF BATH	F01	Copper	90
Lead	ND	B01BF002 BASEMENT HALF BATH	F02	Copper	ND
Lead	ND	01KC003 KITCHEN	P1	Copper	ND
Lead	ND	01KC003 KITCHEN	P2	Copper	ND
Lead	3	01KC003 KITCHEN	F01	Copper	ND
Lead	ND	01KC003 KITCHEN	F02	Copper	ND
Lead	7	01BF004 1ST FLOOR HALF BATH	P1	Copper	70
Lead	23	01BF004 1ST FLOOR HALF BATH	P2	Copper	110
Lead	ND	01BF004 1ST FLOOR HALF BATH	F01	Copper	ND
Lead	ND	01BF004 1ST FLOOR HALF BATH	F02	Copper	ND
Lead	ND	01KC003 KITCHEN	CA1	Copper	ND
Lead	ND	01KC003 KITCHEN	CA2	Copper	ND
Lead	ND	01KC003 KITCHEN	CA3	Copper	ND
Lead	ND	01KC003 KITCHEN	CA4	Copper	ND
Lead	ND	01KC003 KITCHEN	CA5	Copper	ND
Lead	ND	01KC003 KITCHEN	CA6	Copper	ND
Lead	ND	01KC003 KITCHEN	CA7	Copper	ND
Lead	ND	01KC003 KITCHEN	CA8	Copper	ND
Lead	ND	01KC003 KITCHEN	CA9	Copper	ND
Lead	ND	01KC003 KITCHEN	CA10	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.