

POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT

Sunny Patch Learning Center



October 4, 2016

INTRODUCTION

During the month of April, 2016, the Department of Licensing and Regulatory Affairs (DLARA) completed replacement of drinking water fixtures at Sunny Patch Learning 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.

On Saturday, April 9, 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 at schools and daycare facilities. This work began in July, 2016.

Water Main Description

An inspection from inside the building yielded a three fourth inch copper main with brass body valve, and one half inch copper distribution through the building.

SAMPLING METHODS

Fixture Sampling

There are eight 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

- Thirty two samples from eight fixtures were collected and sent to the lab for analysis.
- Twenty samples from two specific fixtures were collected and sent to the lab for analysis for deeper plumbing assessment.

SAMPLING RESULTS

Post-Fixture Replacement

April 9, 2016

Of the 52 samples:

- Lead Range: Non-Detected (ND) to 18 parts per billion (ppb)
- Copper Range: ND to 940 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	5	01DW001 A BLDG	P1	Copper	940
Lead	4	01DW001 A BLDG	P2	Copper	250
Lead	ND	01DW001 A BLDG	F01	Copper	580
Lead	ND	01DW001 A BLDG	F02	Copper	120
Lead	ND	01BF002 A BLDG	P1	Copper	150
Lead	1	01BF002 A BLDG	P2	Copper	340
Lead	ND	01BF002 A BLDG	F01	Copper	80
Lead	ND	01BF002 A BLDG	F02	Copper	80
Lead	ND	01BF003 A BLDG	P1	Copper	120
Lead	ND	01BF003 A BLDG	P2	Copper	80
Lead	ND	01BF003 A BLDG	F01	Copper	50
Lead	ND	01BF003 A BLDG	F02	Copper	ND
Lead	ND	01KC004 A BLDG	P1	Copper	180
Lead	ND	01KC004 A BLDG	P2	Copper	60
Lead	ND	01KC004 A BLDG	F01	Copper	70
Lead	ND	01KC004 A BLDG	F02	Copper	70
Lead	ND	01BF001 B BLDG	P1	Copper	ND
Lead	2	01BF001 B BLDG	P2	Copper	50
Lead	ND	01BF001 B BLDG	F01	Copper	ND
Lead	ND	01BF001 B BLDG	F02	Copper	ND
Lead	ND	01BF002 B BLDG	P1	Copper	50
Lead	ND	01BF002 B BLDG	P2	Copper	90
Lead	ND	01BF002 B BLDG	F01	Copper	90
Lead	ND	01BF002 B BLDG	F02	Copper	ND
Lead	1	01DW003 B BLDG	P1	Copper	220
Lead	ND	01DW003 B BLDG	P2	Copper	90
Lead	ND	01DW003 B BLDG	F01	Copper	ND
Lead	ND	01DW003 B BLDG	F02	Copper	ND
Lead	2	01KC004 B BLDG	P1	Copper	90
Lead	ND	01KC004 B BLDG	P2	Copper	110
Lead	ND	01KC004 B BLDG	F01	Copper	120
Lead	ND	01KC004 B BLDG	F02	Copper	ND
Lead	ND	01KC004 A BLDG	CA1	Copper	130
Lead	ND	01KC004 A BLDG	CA2	Copper	60
Lead	ND	01KC004 A BLDG	CA3	Copper	ND
Lead	ND	01KC004 A BLDG	CA4	Copper	ND
Lead	ND	01KC004 A BLDG	CA5	Copper	ND
Lead	ND	01KC004 A BLDG	CA6	Copper	ND
Lead	ND	01KC004 A BLDG	CA7	Copper	ND
Lead	ND	01KC004 A BLDG	CA8	Copper	ND
Lead	ND	01KC004 A BLDG	CA9	Copper	ND
Lead	ND	01KC004 A BLDG	CA10	Copper	ND
Lead	ND	01KC004 B BLDG	CB1	Copper	90
Lead	ND	01KC004 B BLDG	CB2	Copper	70
Lead	18	01KC004 B BLDG	CB3	Copper	70
Lead	ND	01KC004 B BLDG	CB4	Copper	70

• Non-detected (ND) means; for lead the amount in water is less than 1 ppb. for copper the amount in water is less than 50 ppb.

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Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	ND	01KC004 B BLDG	CB5	Copper	60
Lead	ND	01KC004 B BLDG	CB6	Copper	70
Lead	ND	01KC004 B BLDG	CB7	Copper	70
Lead	ND	01KC004 B BLDG	CB8	Copper	60
Lead	ND	01KC004 B BLDG	CB9	Copper	60
Lead	ND	01KC004 B BLDG	CB10	Copper	50