

POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT

Cathedral of Faith Head Start



October 10, 2016

INTRODUCTION

During the month of April 2016, the Department of Licensing and Regulatory Affairs (DLARA) completed replacement of drinking water fixtures at the Cathedral of Faith Head Start. 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 in Flint. This work began in July, 2016.

On Thursday, August 11th, 2016 the Department of Environmental Quality conducted a post-fixture sampling assessment of the plumbing system at the facility.

Water Main Description

An inspection from inside the building yielded a four inch ductile iron main to the meter, and two inch copper lines through the building.

SAMPLING METHODS

Fixture Sampling

There are ten 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

- Forty samples from ten 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 the deeper plumbing assessment.
- During the assessment, all aerators were inspected and cleaned, none had debris.

SAMPLING RESULTS

Post-Fixture Replacement

August 11, 2016
Of the 60 samples:

- Lead Range: Non-Detected (ND) to 50 parts per billion (ppb)
- Copper Range: 60 to 2,950 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	1	KC001 MUTLI- PURPOSE ROOM	P1	Copper	310
Lead	ND	KC001 MULTI-PURPOSE ROOM	P2	Copper	390
Lead	ND	KC001 MULTI-PURPOSE ROOM	F01	Copper	340
Lead	ND	KC001 MULTI-PURPOSE ROOM	F02	Copper	220
Lead	ND	BF002 MEN`S BATHROOM	P1	Copper	240
Lead	ND	BF002 MEN`S BATHROOM	P2	Copper	270
Lead	ND	BF002 MEN`S BATHROOM	F01	Copper	230
Lead	ND	BF002 MEN`S BATHROOM	F02	Copper	170
Lead	ND	BF003 WOMEN`S BATHROOM	P1	Copper	160
Lead	ND	BF003 WOMEN`S BATHROOM	P2	Copper	270
Lead	ND	BF003 WOMEN`S BATHROOM	F01	Copper	80
Lead	ND	BF003 WOMEN`S BATHROOM	F02	Copper	60
Lead	ND	BF004 WOMEN`S BATHROOM	P1	Copper	290
Lead	ND	BF004 WOMEN`S BATHROOM	P2	Copper	620
Lead	ND	BF004 WOMEN`S BATHROOM	F01	Copper	350
Lead	ND	BF004 WOMEN`S BATHROOM	F02	Copper	70
Lead	ND	WC005 OUTSIDE WOMEN`S ROOM	P1	Copper	1710
Lead	1	WC005 OUTSIDE WOMEN`S ROOM	P2	Copper	1580
Lead	ND	WC005 OUTSIDE WOMEN`S ROOM	F01	Copper	130
Lead	ND	WC005 OUTSIDE WOMEN`S ROOM	F02	Copper	100
Lead	2	SP006 CHAPEL	P1	Copper	310
Lead	ND	SP006 CHAPEL	P2	Copper	540
Lead	ND	SP006 CHAPEL	F01	Copper	490
Lead	ND	SP006 CHAPEL	F02	Copper	120
Lead	ND	WC007 OUTSIDE MEN`S ROOM	P1	Copper	2950
Lead	ND	WC007 OUTSIDE MEN`S ROOM	P2	Copper	2720
Lead	2	WC007 OUTSIDE MEN`S ROOM	F01	Copper	1670
Lead	ND	WC007 OUTSIDE MEN`S ROOM	F02	Copper	500
Lead	50	BF008 MEN`S ROOM	P1	Copper	460
Lead	ND	BF008 MEN`S ROOM	P2	Copper	180
Lead	ND	BF008 MEN`S ROOM	F01	Copper	140
Lead	2	BF008 MEN`S ROOM	F02	Copper	140
Lead	ND	BF009 MEN`S ROOM	P1	Copper	180
Lead	ND	BF009 MEN`S ROOM	P2	Copper	210
Lead	ND	BF009 MEN`S ROOM	F01	Copper	140
Lead	ND	BF009 MEN`S ROOM	F02	Copper	130
Lead	ND	CF010 CLASSROOM TWO	P1	Copper	250
Lead	ND	CF010 CLASSROOM TWO	P2	Copper	220
Lead	ND	CF010 CLASSROOM TWO	F01	Copper	290
Lead	ND	CF010 CLASSROOM TWO	F02	Copper	160
Lead	ND	KC001 MULTI-PURPOSE ROOM	CA1	Copper	250
Lead	ND	KC001 MULTI-PURPOSE ROOM	CA2	Copper	200
Lead	ND	KC001 MULTI-PURPOSE ROOM	CA3	Copper	140

Non-detected (ND) means; for lead the amount in water is less than 1 ppb,
and 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	KC001 MULTI-PURPOSE ROOM	CA4	Copper	90
Lead	ND	KC001 MULTI-PURPOSE ROOM	CA5	Copper	70
Lead	ND	KC001 MULTI-PURPOSE ROOM	CA6	Copper	70
Lead	ND	KC001 MULTI-PURPOSE ROOM	CA7	Copper	60
Lead	ND	KC001 MULTI-PURPOSE ROOM	CA8	Copper	60
Lead	ND	KC001 MULTI-PURPOSE ROOM	CA9	Copper	60
Lead	ND	KC001 MULTI-PURPOSE ROOM	CA10	Copper	60
Lead	ND	CF010 CLASSROOM TWO	CB1	Copper	150
Lead	ND	CF010 CLASSROOM TWO	CB2	Copper	140
Lead	ND	CF010 CLASSROOM TWO	CB3	Copper	120
Lead	ND	CF010 CLASSROOM TWO	CB4	Copper	110
Lead	ND	CF010 CLASSROOM TWO	CB5	Copper	130
Lead	ND	CF010 CLASSROOM TWO	CB6	Copper	100
Lead	ND	CF010 CLASSROOM TWO	CB7	Copper	100
Lead	ND	CF010 CLASSROOM TWO	CB8	Copper	130
Lead	ND	CF010 CLASSROOM TWO	CB9	Copper	110
Lead	ND	CF010 CLASSROOM TWO	CB10	Copper	100

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.