

POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT

Flint Youth Theater



September 21, 2016

INTRODUCTION

During the month of May, 2016, the Department of Licensing and Regulatory Affairs (DLARA) completed replacement of drinking water fixtures at Flint Youth Theater. 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 materials from the building's water supply system.

On Saturday, June 18, 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, the DLARA started offering the installation of filters to schools and daycare facilities. This work began in July, 2016.

Water Main Description

An internal inspection of the building yielded a four inch ductile iron main and a four inch galvanized line to the building's distribution system.

SAMPLING METHODS

Fixture Sampling

There are nine drinking water fixtures that were identified at the school. 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-six samples from the nine fixtures were collected and sent to the lab for analysis.
- Ten samples from one specific fixture were collected to test the deeper part of the plumbing system and sent to the lab for analysis.

SAMPLING RESULTS

Post-Fixture Replacement

June 18, 2016
Of the 46 samples:

- Lead Range: Non-Detected (ND) to 15 parts per billion (ppb)
- Copper Range: ND to 1,420 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.

Flint Youth Theater

June 18, 2016

Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	2	01WC001 DRESSING ROOM	P1	Copper	930
Lead	6	01WC001 DRESSING ROOM	P2	Copper	410
Lead	7	01WC001 DRESSING ROOM	F01	Copper	140
Lead	11	01WC001 DRESSING ROOM	F02	Copper	150
Lead	3	01KC002 GREEN ROOM AREA #1	P1	Copper	110
Lead	2	01KC002 GREEN ROOM AREA #1	P2	Copper	70
Lead	ND	01KC002 GREEN ROOM AREA #1	F01	Copper	50
Lead	ND	01KC002 GREEN ROOM AREA #1	F02	Copper	ND
Lead	4	01KC003 GREEN ROOM AREA #2	P1	Copper	340
Lead	2	01KC003 GREEN ROOM AREA #2	P2	Copper	320
Lead	ND	01KC003 GREEN ROOM AREA #2	F01	Copper	90
Lead	ND	01KC003 GREEN ROOM AREA #2	F02	Copper	80
Lead	ND	01WC004 GREEN ROOM AREA #2	P1	Copper	1420
Lead	2	01WC004 GREEN ROOM AREA #2	P2	Copper	580
Lead	ND	01WC004 GREEN ROOM AREA #2	F01	Copper	480
Lead	ND	01WC004 GREEN ROOM AREA #2	F02	Copper	140
Lead	4	01WC005 BOWER THEATER HALL	P1	Copper	1070
Lead	15	01WC005 BOWER THEATER HALL	P2	Copper	610
Lead	2	01WC005 BOWER THEATER HALL	F01	Copper	100
Lead	ND	01WC005 BOWER THEATER HALL	F02	Copper	80
Lead	5	01WC006 BOWER THEATER HALL	P1	Copper	1260
Lead	13	01WC006 BOWER THEATER HALL	P2	Copper	630
Lead	2	01WC006 BOWER THEATER HALL	F01	Copper	100
Lead	ND	01WC006 BOWER THEATER HALL	F02	Copper	80
Lead	1	01BF007 DRESSING ROOM A	P1	Copper	190
Lead	ND	01BF007 DRESSING ROOM A	P2	Copper	170
Lead	ND	01BF007 DRESSING ROOM A	F01	Copper	130
Lead	ND	01BF007 DRESSING ROOM A	F02	Copper	130
Lead	ND	01BF008 DRESSING ROOM B	P1	Copper	130
Lead	2	01BF008 DRESSING ROOM B	P2	Copper	180
Lead	ND	01BF008 DRESSING ROOM B	F01	Copper	180
Lead	ND	01BF008 DRESSING ROOM B	F02	Copper	130
Lead	ND	01WC009 MAIN LOBBY	P1	Copper	760
Lead	ND	01WC009 MAIN LOBBY	P2	Copper	580
Lead	ND	01WC009 MAIN LOBBY	F01	Copper	280
Lead	ND	01WC009 MAIN LOBBY	F02	Copper	180
Lead	2	01KC002 GREEN ROOM AREA #1	1-1	Copper	60
Lead	ND	01KC002 GREEN ROOM AREA #1	1-2	Copper	ND
Lead	ND	01KC002 GREEN ROOM AREA #1	1-3	Copper	ND
Lead	ND	01KC002 GREEN ROOM AREA #1	1-4	Copper	ND
Lead	ND	01KC002 GREEN ROOM AREA #1	1-5	Copper	ND
Lead	ND	01KC002 GREEN ROOM AREA #1	1-6	Copper	ND

* 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	01KC002 GREEN ROOM AREA #1	1-7	Copper	ND
Lead	ND	01KC002 GREEN ROOM AREA #1	1-8	Copper	ND
Lead	ND	01KC002 GREEN ROOM AREA #1	1-9	Copper	ND
Lead	ND	01KC002 GREEN ROOM AREA #1	1-10	Copper	ND