

POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT

St. John Vianney School



August 12, 2016

INTRODUCTION

During the week of March 28, 2016, the Department of Licensing and Regulatory Affairs (DLARA) completed replacement of drinking water fixtures at St. John Vianny School. 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, April 16, 2016, the DLARA and 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 the installation of filters on drinking water fixtures at the daycare facilities and schools in Flint. This work began in July, 2016.

SAMPLING METHODS

Fixture Sampling

There are 23 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

- Ninety-two samples from the 23 fixtures were collected and sent to the lab for analysis.
- One hundred samples from ten specific fixtures were collected to test the deeper part

of the plumbing system and sent to the lab for analysis.

SAMPLING RESULTS

Post-Fixture Replacement

April 16, 2016

Of the 192 samples:

- Lead Range: Non-Detected (ND) to 41 parts per billion (ppb)
- Copper Range: ND to 1,660 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.

St. John Vianney

April 16, 2016

Lead	Result ppb	Sample Description	Site Code	Copper	Result ppb
Lead	ND	01WC001	P1	Copper	1600
Lead	ND	01WC001	P2	Copper	230
Lead	ND	01WC001	F01	Copper	ND
Lead	ND	01WC001	F02	Copper	ND
Lead	ND	01WC002	P1	Copper	ND
Lead	ND	01WC002	P2	Copper	ND
Lead	ND	01WC002	F01	Copper	ND
Lead	ND	01WC002	F02	Copper	ND
Lead	ND	02WC003	P1	Copper	310
Lead	ND	02WC003	P2	Copper	120
Lead	ND	02WC003	F01	Copper	ND
Lead	ND	02WC003	F02	Copper	ND
Lead	2	01KC004	P1	Copper	170
Lead	10	01KC004	P2	Copper	110
Lead	ND	01KC004	F01	Copper	60
Lead	3	01KC004	F02	Copper	60
Lead	4	02CF005	P1	Copper	450
Lead	ND	02CF005	P2	Copper	480
Lead	2	02CF005	F01	Copper	370
Lead	ND	02CF005	F02	Copper	90
Lead	4	LLKC006	P1	Copper	160
Lead	ND	LLKC006	P2	Copper	540
Lead	ND	LLKC006	F01	Copper	370
Lead	ND	LLKC006	F02	Copper	180
Lead	2	01KC007	P1	Copper	290
Lead	4	01KC007	P2	Copper	360
Lead	ND	01KC007	F01	Copper	100
Lead	ND	01KC007	F02	Copper	90
Lead	3	01KC008	P1	Copper	470
Lead	4	01KC008	P2	Copper	620
Lead	4	01KC008	F01	Copper	600
Lead	1	01KC008	F02	Copper	300
Lead	ND	02CF009	P1	Copper	260
Lead	ND	02CF009	P2	Copper	620
Lead	ND	02CF009	F01	Copper	540
Lead	2	02CF009	F02	Copper	460
Lead	ND	LLWC010	P1	Copper	1420
Lead	ND	LLWC010	P2	Copper	130
Lead	ND	LLWC010	F01	Copper	ND
Lead	ND	LLWC010	F02	Copper	ND
Lead	ND	01WC011	P1	Copper	1580
Lead	ND	01WC011	P2	Copper	150
Lead	ND	01WC011	F01	Copper	ND

The result of 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.

Lead	Result ppb	Sample Description	Site Code	Copper	Result ppb
Lead	ND	01WC011	F02	Copper	ND
Lead	ND	02WC012	P1	Copper	1660
Lead	ND	02WC012	P2	Copper	290
Lead	ND	02WC012	F01	Copper	ND
Lead	ND	02WC012	F02	Copper	ND
Lead	1	LLCF013	P1	Copper	320
Lead	ND	LLCF013	P2	Copper	470
Lead	41	LLCF013	F01	Copper	390
Lead	2	LLCF013	F02	Copper	270
Lead	3	LLCF014	P1	Copper	450
Lead	2	LLCF014	P2	Copper	190
Lead	ND	LLCF014	F01	Copper	160
Lead	ND	LLCF014	F02	Copper	190
Lead	ND	LLWC015	P1	Copper	1060
Lead	ND	LLWC015	P2	Copper	130
Lead	ND	LLWC015	F01	Copper	ND
Lead	ND	LLWC015	F02	Copper	ND
Lead	ND	01WC016	P1	Copper	1220
Lead	ND	01WC016	P2	Copper	150
Lead	ND	01WC016	F01	Copper	ND
Lead	ND	01WC016	F02	Copper	ND
Lead	ND	02WC017	P1	Copper	440
Lead	ND	02WC017	P2	Copper	100
Lead	ND	02WC017	F01	Copper	ND
Lead	ND	02WC017	F02	Copper	ND
Lead	27	LLCF018	P1	Copper	360
Lead	ND	LLCF018	P2	Copper	380
Lead	ND	LLCF018	F01	Copper	340
Lead	ND	LLCF018	F02	Copper	180
Lead	ND	LLCF019	P1	Copper	230
Lead	ND	LLCF019	P2	Copper	150
Lead	ND	LLCF019	F01	Copper	170
Lead	1	LLCF019	F02	Copper	180
Lead	ND	LLWC020	P1	Copper	1140
Lead	ND	LLWC020	P2	Copper	120
Lead	ND	LLWC020	F01	Copper	ND
Lead	ND	LLWC020	F02	Copper	50
Lead	ND	LLCF021	P1	Copper	270
Lead	3	LLCF021	P2	Copper	540
Lead	ND	LLCF021	F01	Copper	ND
Lead	ND	LLCF021	F02	Copper	ND
Lead	ND	01WC022	P1	Copper	670
Lead	ND	01WC022	P2	Copper	120
Lead	ND	01WC022	F01	Copper	ND
Lead	ND	01WC022	F02	Copper	ND
Lead	ND	02WC023	P1	Copper	1010

The result of 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.

Lead	Result ppb	Sample Description	Site Code	Copper	Result ppb
Lead	ND	02WC023	P2	Copper	180
Lead	ND	02WC023	F01	Copper	ND
Lead	ND	02WC023	F02	Copper	60
Lead	1	01KC004	A1	Copper	70
Lead	ND	01KC004	A2	Copper	ND
Lead	ND	01KC004	A3	Copper	ND
Lead	ND	01KC004	A4	Copper	ND
Lead	ND	01KC004	A5	Copper	ND
Lead	ND	01KC004	A6	Copper	50
Lead	ND	01KC004	A7	Copper	50
Lead	ND	01KC004	A8	Copper	60
Lead	ND	01KC004	A9	Copper	60
Lead	ND	01KC004	A10	Copper	60
Lead	1	02CF005	B1	Copper	320
Lead	1	02CF005	B2	Copper	160
Lead	ND	02CF005	B3	Copper	90
Lead	ND	02CF005	B4	Copper	80
Lead	ND	02CF005	B5	Copper	70
Lead	ND	02CF005	B6	Copper	70
Lead	ND	02CF005	B7	Copper	60
Lead	ND	02CF005	B8	Copper	60
Lead	ND	02CF005	B9	Copper	60
Lead	ND	02CF005	B10	Copper	60
Lead	ND	LLKC006	C1	Copper	310
Lead	ND	LLKC006	C2	Copper	150
Lead	ND	LLKC006	C3	Copper	80
Lead	ND	LLKC006	C4	Copper	80
Lead	ND	LLKC006	C5	Copper	70
Lead	ND	LLKC006	C6	Copper	70
Lead	ND	LLKC006	C7	Copper	70
Lead	ND	LLKC006	C8	Copper	70
Lead	ND	LLKC006	C9	Copper	70
Lead	ND	LLKC006	C10	Copper	70
Lead	2	01KC007	D1	Copper	200
Lead	ND	01KC007	D2	Copper	110
Lead	ND	01KC007	D3	Copper	100
Lead	ND	01KC007	D4	Copper	90
Lead	ND	01KC007	D5	Copper	90
Lead	ND	01KC007	D6	Copper	90
Lead	ND	01KC007	D7	Copper	80
Lead	ND	01KC007	D8	Copper	80
Lead	ND	01KC007	D9	Copper	80
Lead	ND	01KC007	D10	Copper	80
Lead	2	02CF009	E1	Copper	480
Lead	1	02CF009	E2	Copper	460
Lead	1	02CF009	E3	Copper	390

The result of 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.

Lead	Result ppb	Sample Description	Site Code	Copper	Result ppb
Lead	ND	02CF009	E4	Copper	300
Lead	ND	02CF009	E5	Copper	290
Lead	ND	02CF009	E6	Copper	260
Lead	ND	02CF009	E7	Copper	190
Lead	ND	02CF009	E8	Copper	150
Lead	ND	02CF009	E9	Copper	130
Lead	ND	02CF009	E10	Copper	120
Lead	ND	02WC012	F1	Copper	210
Lead	ND	02WC012	F2	Copper	ND
Lead	ND	02WC012	F3	Copper	ND
Lead	ND	02WC012	F4	Copper	ND
Lead	ND	02WC012	F5	Copper	ND
Lead	ND	02WC012	F6	Copper	ND
Lead	ND	02WC012	F7	Copper	ND
Lead	ND	02WC012	F8	Copper	ND
Lead	ND	02WC012	F9	Copper	ND
Lead	ND	02WC012	F10	Copper	ND
Lead	7	LLCF013	G1	Copper	350
Lead	1	LLCF013	G2	Copper	180
Lead	1	LLCF013	G3	Copper	170
Lead	ND	LLCF013	G4	Copper	160
Lead	1	LLCF013	G5	Copper	130
Lead	ND	LLCF013	G6	Copper	100
Lead	ND	LLCF013	G7	Copper	80
Lead	ND	LLCF013	G8	Copper	80
Lead	ND	LLCF013	G9	Copper	70
Lead	ND	LLCF013	G10	Copper	70
Lead	1	LLCF019	H1	Copper	370
Lead	1	LLCF019	H2	Copper	160
Lead	1	LLCF019	H3	Copper	180
Lead	1	LLCF019	H4	Copper	190
Lead	1	LLCF019	H5	Copper	180
Lead	1	LLCF019	H6	Copper	180
Lead	1	LLCF019	H7	Copper	180
Lead	1	LLCF019	H8	Copper	180
Lead	1	LLCF019	H9	Copper	180
Lead	1	LLCF019	H10	Copper	170
Lead	ND	LLCF021	I1	Copper	100
Lead	ND	LLCF021	I2	Copper	ND
Lead	ND	LLCF021	I3	Copper	ND
Lead	ND	LLCF021	I4	Copper	ND
Lead	ND	LLCF021	I5	Copper	ND
Lead	ND	LLCF021	I6	Copper	ND
Lead	ND	LLCF021	I7	Copper	ND
Lead	ND	LLCF021	I8	Copper	ND
Lead	ND	LLCF021	I9	Copper	ND

The result of 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.

Lead	Result ppb	Sample Description	Site Code	Copper	Result ppb
Lead	ND	LLCF021	I10	Copper	ND
Lead	ND	02WC023	J1	Copper	240
Lead	ND	02WC023	J2	Copper	ND
Lead	ND	02WC023	J3	Copper	ND
Lead	ND	02WC023	J4	Copper	ND
Lead	ND	02WC023	J5	Copper	ND
Lead	ND	02WC023	J6	Copper	ND
Lead	ND	02WC023	J7	Copper	ND
Lead	ND	02WC023	J8	Copper	ND
Lead	ND	02WC023	J9	Copper	ND
Lead	ND	02WC023	J10	Copper	ND

The result of 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.