

POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT

St. Pius X School



August 15, 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. Pius X 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 23, 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 the installation of filters on drinking water fixtures at the daycare facilities and schools in Flint. This work began in July, 2016.

Water Main Description

An internal inspection of the building yielded a two inch copper water service line. In addition, the distribution system is two inch copper piping.

SAMPLING METHODS

Fixture Sampling

There are 14 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

- Fifty six samples from the 14 fixtures were collected and sent to the lab for analysis.
- Thirty samples from three 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 23, 2016

Of the 86 samples:

- Lead Range: Non-Detected (ND) to 76 parts per billion (ppb)
- Copper Range: ND to 490 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. Pius X Catholic School
April 23, 2106

Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	3	001DW001 PRESCHOOL	P1	Copper	370
Lead	ND	001DW001 PRESCHOOL	P2	Copper	490
Lead	ND	001DW001 PRESCHOOL	F01	Copper	280
Lead	ND	001DW001 PRESCHOOL	F02	Copper	300
Lead	2	001CF002 PRESCHOOL	P1	Copper	240
Lead	ND	001CF002 PRESCHOOL	P2	Copper	290
Lead	ND	001CF002 PRESCHOOL	F01	Copper	300
Lead	ND	001CF002 PRESCHOOL	F02	Copper	270
Lead	ND	001CF002B PRESCHOOL	P1	Copper	270
Lead	ND	001CF002B PRESCHOOL	P2	Copper	460
Lead	ND	001CF002B PRESCHOOL	F01	Copper	340
Lead	ND	001CF002B PRESCHOOL	F02	Copper	340
Lead	1	001CF003 JR. KIDERGARTEN	P1	Copper	240
Lead	ND	001CF003 JR. KIDERGARTEN	P2	Copper	410
Lead	ND	001CF003 JR. KIDERGARTEN	F01	Copper	350
Lead	ND	001CF003 JR. KIDERGARTEN	F02	Copper	320
Lead	2	001CF004 JR. KIDERGARTEN	P1	Copper	160
Lead	ND	001CF004 JR. KIDERGARTEN	P2	Copper	310
Lead	ND	001CF004 JR. KIDERGARTEN	F01	Copper	300
Lead	ND	001CF004 JR. KIDERGARTEN	F02	Copper	300
Lead	ND	001DW005 JR. KIDERGARTEN	P1	Copper	240
Lead	ND	001DW005 JR. KIDERGARTEN	P2	Copper	300
Lead	ND	001DW005 JR. KIDERGARTEN	F01	Copper	310
Lead	ND	001DW005 JR. KIDERGARTEN	F02	Copper	280
Lead	ND	001WC006 MAIN HALLWAY	P1	Copper	90
Lead	ND	001WC006 MAIN HALLWAY	P2	Copper	260
Lead	ND	001WC006 MAIN HALLWAY	F01	Copper	170
Lead	ND	001WC006 MAIN HALLWAY	F02	Copper	60
Lead	ND	001WC007 MAIN HALLWAY	P1	Copper	50
Lead	ND	001WC007 MAIN HALLWAY	P2	Copper	50
Lead	ND	001WC007 MAIN HALLWAY	F01	Copper	ND
Lead	ND	001WC007 MAIN HALLWAY	F02	Copper	ND
Lead	5	001CF008 CLASSROOM 1	P1	Copper	230
Lead	4	001CF008 CLASSROOM 1	P2	Copper	240
Lead	2	001CF008 CLASSROOM 1	F01	Copper	160
Lead	ND	001CF008 CLASSROOM 1	F02	Copper	150
Lead	4	001CF009 CLASSROOM 10	P1	Copper	470
Lead	2	001CF009 CLASSROOM 10	P2	Copper	420
Lead	1	001CF009 CLASSROOM 10	F01	Copper	260
Lead	ND	001CF009 CLASSROOM 10	F02	Copper	80
Lead	ND	001DW010 GYM EAST END	P1	Copper	110
Lead	ND	001DW010 GYM EAST END	P2	Copper	240
Lead	ND	001DW010 GYM EAST END	F01	Copper	120

Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	ND	001DW010 GYM EAST END	F02	Copper	ND
Lead	ND	001DW010A GYM EAST END	P1	Copper	ND
Lead	ND	001DW010A GYM EAST END	P2	Copper	ND
Lead	ND	001DW010A GYM EAST END	F01	Copper	ND
Lead	ND	001DW010A GYM EAST END	F02	Copper	ND
Lead	76	001KC011 CAFETERIA KITCHEN	P1	Copper	290
Lead	21	001KC011 CAFETERIA KITCHEN	P2	Copper	490
Lead	2	001KC011 CAFETERIA KITCHEN	F01	Copper	340
Lead	1	001KC011 CAFETERIA KITCHEN	F02	Copper	140
Lead	6	001KC012 YOUTH ROOM	P1	Copper	350
Lead	5	001KC012 YOUTH ROOM	P2	Copper	440
Lead	ND	001KC012 YOUTH ROOM	F01	Copper	180
Lead	ND	001KC012 YOUTH ROOM	F02	Copper	170
Lead	ND	001CF002 PRESCHOOL	CA1	Copper	320
Lead	ND	001CF002 PRESCHOOL	CA2	Copper	240
Lead	ND	001CF002 PRESCHOOL	CA3	Copper	210
Lead	ND	001CF002 PRESCHOOL	CA4	Copper	180
Lead	ND	001CF002 PRESCHOOL	CA5	Copper	190
Lead	ND	001CF002 PRESCHOOL	CA6	Copper	170
Lead	ND	001CF002 PRESCHOOL	CA7	Copper	160
Lead	ND	001CF002 PRESCHOOL	CA8	Copper	140
Lead	ND	001CF002 PRESCHOOL	CA9	Copper	140
Lead	ND	001CF002 PRESCHOOL	CA10	Copper	130
Lead	1	001CF008 CLASSROOM 1	CB1	Copper	170
Lead	ND	001CF008 CLASSROOM 1	CB2	Copper	180
Lead	ND	001CF008 CLASSROOM 1	CB3	Copper	160
Lead	ND	001CF008 CLASSROOM 1	CB4	Copper	150
Lead	ND	001CF008 CLASSROOM 1	CB5	Copper	180
Lead	ND	001CF008 CLASSROOM 1	CB6	Copper	160
Lead	ND	001CF008 CLASSROOM 1	CB7	Copper	150
Lead	ND	001CF008 CLASSROOM 1	CB8	Copper	140
Lead	ND	001CF008 CLASSROOM 1	CB9	Copper	140
Lead	ND	001CF008 CLASSROOM 1	CB10	Copper	130
Lead	1	001KC012 YOUTH ROOM	CC1	Copper	250
Lead	ND	001KC012 YOUTH ROOM	CC2	Copper	160
Lead	ND	001KC012 YOUTH ROOM	CC3	Copper	150
Lead	ND	001KC012 YOUTH ROOM	CC4	Copper	150
Lead	ND	001KC012 YOUTH ROOM	CC5	Copper	140
Lead	ND	001KC012 YOUTH ROOM	CC6	Copper	110
Lead	ND	001KC012 YOUTH ROOM	CC7	Copper	100
Lead	ND	001KC012 YOUTH ROOM	CC8	Copper	100
Lead	ND	001KC012 YOUTH ROOM	CC9	Copper	100
Lead	ND	001KC012 YOUTH ROOM	CC10	Copper	100