

POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT NORTHRIDGE ACADEMY



December 9, 2016

INTRODUCTION

During the month of April, 2016, the Department of Licensing and Regulatory Affairs (DLARA) completed replacement of drinking water fixtures at Northridge Academy. 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 16, 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.

Northridge Academy recently relocated and is no longer operational at the Pearson Road address. The new location is not on the Flint Water System.

Water Main Description

An inspection from inside the building yielded a three-inch ductile iron water main. The distribution system consists of PVC Schedule 80 pipe and copper lines.

SAMPLING METHODS

Fixture Sampling

There are four 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

- Sixteen samples from four fixtures were collected and sent to the lab for analysis.
- Thirty samples from three specific fixtures were collected and sent to the lab for analysis for the deeper plumbing assessment.

SAMPLING RESULTS

Post-Fixture Replacement

April 16, 2016
Of the 46 samples:

- Lead Range: Non-Detected (ND) to 2 parts per billion (ppb)
- Copper Range: ND to 2,140 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.

Northridge Academy

April 16, 2016

Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	ND	01KC001 TEACHERS LOUNGE	P1	Copper	ND
Lead	1	01KC001 TEACHERS LOUNGE	P2	Copper	130
Lead	ND	01KC001 TEACHERS LOUNGE	F01	Copper	ND
Lead	ND	01KC001 TEACHERS LOUNGE	F02	Copper	ND
Lead	ND	01WC002 ACROSS FROM 1121	P1	Copper	1870
Lead	ND	01WC002 ACROSS FROM 1121	P2	Copper	1160
Lead	ND	01WC002 ACROSS FROM 1121	F01	Copper	140
Lead	ND	01WC002 ACROSS FROM 1121	F02	Copper	130
Lead	ND	01WC003 ACROSS FROM 1121	P1	Copper	200
Lead	ND	01WC003 ACROSS FROM 1121	P2	Copper	150
Lead	ND	01WC003 ACROSS FROM 1121	F01	Copper	130
Lead	ND	01WC003 ACROSS FROM 1121	F02	Copper	130
Lead	ND	01WC004 NEXT TO ROOM 102	P1	Copper	2140
Lead	2	01WC004 NEXT TO ROOM 102	P2	Copper	1540
Lead	1	01WC004 NEXT TO ROOM 102	F01	Copper	450
Lead	ND	01WC004 NEXT TO ROOM 102	F02	Copper	320
Lead	ND	01KC001 TEACHERS LOUNGE	CA1	Copper	ND
Lead	ND	01KC001 TEACHERS LOUNGE	CA2	Copper	ND
Lead	ND	01KC001 TEACHERS LOUNGE	CA3	Copper	70
Lead	ND	01KC001 TEACHERS LOUNGE	CA4	Copper	80
Lead	ND	01KC001 TEACHERS LOUNGE	CA5	Copper	90
Lead	ND	01KC001 TEACHERS LOUNGE	CA6	Copper	100
Lead	ND	01KC001 TEACHERS LOUNGE	CA7	Copper	110
Lead	ND	01KC001 TEACHERS LOUNGE	CA8	Copper	110
Lead	ND	01KC001 TEACHERS LOUNGE	CA9	Copper	110
Lead	ND	01KC001 TEACHERS LOUNGE	CA10	Copper	110
Lead	ND	01WC003 ACROSS FROM 1121	CB1	Copper	200
Lead	ND	01WC003 ACROSS FROM 1121	CB2	Copper	120
Lead	ND	01WC003 ACROSS FROM 1121	CB3	Copper	120
Lead	ND	01WC003 ACROSS FROM 1121	CB4	Copper	130
Lead	ND	01WC003 ACROSS FROM 1121	CB5	Copper	130
Lead	ND	01WC003 ACROSS FROM 1121	CB6	Copper	130
Lead	ND	01WC003 ACROSS FROM 1121	CB7	Copper	130
Lead	ND	01WC003 ACROSS FROM 1121	CB8	Copper	130
Lead	ND	01WC003 ACROSS FROM 1121	CB9	Copper	130
Lead	ND	01WC003 ACROSS FROM 1121	CB10	Copper	130
Lead	ND	01WC004 NEXT TO ROOM 102	CC1	Copper	450
Lead	ND	01WC004 NEXT TO ROOM 102	CC2	Copper	320
Lead	ND	01WC004 NEXT TO ROOM 102	CC3	Copper	270
Lead	ND	01WC004 NEXT TO ROOM 102	CC4	Copper	270
Lead	ND	01WC004 NEXT TO ROOM 102	CC5	Copper	280
Lead	ND	01WC004 NEXT TO ROOM 102	CC6	Copper	280
Lead	ND	01WC004 NEXT TO ROOM 102	CC7	Copper	290
Lead	ND	01WC004 NEXT TO ROOM 102	CC8	Copper	270
Lead	ND	01WC004 NEXT TO ROOM 102	CC9	Copper	240
Lead	ND	01WC004 NEXT TO ROOM 102	CC10	Copper	230

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.