

# POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT

WAY Academy of Flint



September 14, 2016

## INTRODUCTION

During the week of May 9, 2016, the Department of Licensing and Regulatory Affairs (DLARA) completed replacement of drinking water fixtures at WAY Academy of Flint. 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 4, 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 on drinking water fixtures at the schools and daycare facilities in Flint. This work began in July, 2016.

### Water Main Description

Upon inspection of the water main from the inside of the building, the water main was identified to be three inch ductile iron. The distribution system was two and half inch copper.

## SAMPLING METHODS

### Fixture Sampling

There are four drinking water fixtures that were identified at the school and two were not sampled because they did not have electricity supplied. After a minimum six-hour stagnation period, four samples were collected at both of the working fixtures. 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

- Eight samples from two fixtures were collected and sent to the lab for analysis.
- Two water coolers in the building were not sampled because they did not have electricity supplied.
- Twenty samples from the two working fixtures were collected to test the deeper part of the plumbing system and sent to the lab for analysis.

## SAMPLING RESULTS

### Post-Fixture Replacement

June 4, 2016  
Of the 28 samples:

- Lead Range: Non-Detected (ND) to 2 parts per billion (ppb)
- Copper Range: ND to 1,560 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.

## Way Academy Flint Campus

June 4, 2016

| Lead | Result (ppb) | Sample Description           | Site Code | Copper | Result (ppb) |
|------|--------------|------------------------------|-----------|--------|--------------|
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | P1        | Copper | 160          |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | P2        | Copper | 240          |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | F01       | Copper | 130          |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | F02       | Copper | 100          |
| Lead | ND           | 02WC004 BREAK ROOM           | P1        | Copper | 1560         |
| Lead | 2            | 02WC004 BREAK ROOM           | P2        | Copper | 390          |
| Lead | ND           | 02WC004 BREAK ROOM           | F01       | Copper | 60           |
| Lead | ND           | 02WC004 BREAK ROOM           | F02       | Copper | 50           |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | CB1       | Copper | 110          |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | CB2       | Copper | 100          |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | CB3       | Copper | 90           |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | CB4       | Copper | 70           |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | CB5       | Copper | 60           |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | CB6       | Copper | 60           |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | CB7       | Copper | 60           |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | CB8       | Copper | 60           |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | CB9       | Copper | 60           |
| Lead | ND           | 02CF003 RIGHT OF MAIN OFFICE | CB10      | Copper | 60           |
| Lead | ND           | 02WC004 BREAK ROOM           | CC1       | Copper | 100          |
| Lead | ND           | 02WC004 BREAK ROOM           | CC2       | Copper | 50           |
| Lead | ND           | 02WC004 BREAK ROOM           | CC3       | Copper | 50           |
| Lead | ND           | 02WC004 BREAK ROOM           | CC4       | Copper | 50           |
| Lead | ND           | 02WC004 BREAK ROOM           | CC5       | Copper | 50           |
| Lead | ND           | 02WC004 BREAK ROOM           | CC6       | Copper | 50           |
| Lead | ND           | 02WC004 BREAK ROOM           | CC7       | Copper | 50           |
| Lead | ND           | 02WC004 BREAK ROOM           | CC8       | Copper | 50           |
| Lead | ND           | 02WC004 BREAK ROOM           | CC9       | Copper | 50           |
| Lead | ND           | 02WC004 BREAK ROOM           | CC10      | Copper | 50           |