INTRODUCTION

During the months of November and December 2017, the Department of Licensing and Regulatory Affairs (DLARA) flushed the plumbing lines at each of the large Flint daycare facilities to and the Department of Environmental Quality (DEQ) sampled each facility.

Follow-up samples were taken at points where lead levels exceeded 15 parts per billion (ppb) and/or copper levels exceeded 1,300 ppb.

Resampled fixtures included:

- Just for Kids Group Home, fixture 01KC003 on the first floor.
- Manley Early Childhood Center fixtures KC038A in Room 106, KC040A in Room 105 and DW022 newt to Room 227.
- Mott Early Childhood Learning, fixture 01WC013 outside Room 109.

non-filtered water, unless otherwise indicated in sample notes. Alternatively, water coolers are noted "WC" and drinking water bubblers are noted "DW." Both water coolers and bubblers have inline filters installed, so the samples are of filtered water, unless otherwise noted. Please also note that the fixture type is not necessarily indicative of its actual purpose. It is used to categorize the type of fixture. Not 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.

Sample results can be found online at www.michigan.gov/flintwater, select "Testing Results" and "Establishment Testing."

*Indicates that additional follow-up is needed. DEQ and LARA will work with the owners of the facility to determine a course of action to remediate the exposure.

SAMPLING METHOD

Fixture Sampling

Fixtures were flushed the night before the sampling. After a minimum six-hour stagnation period, samples were collected at each of the fixtures. The samples were collected in a 250 milliliter (mL) bottle immediately after turning on the cold water tap.

Deep Plumbing Sampling

Each fixture was also sampled to evaluate the deep plumbing. This consecutive sampling method is used to determine the impact of any lead sources located deeper in the supply plumbing of the building. During this process, ten bottles are collected in a row. These bottles are one liter (L) in size.

RESULTS AND NOTES

When reviewing the lab sample results, the sample description will contain letters to indicate the fixture type. Specifically, kitchen faucets have "KC" in the name, restroom faucets are noted "BF," and Nurses Stations are "NS." Samples from these fixtures are

Just for Kids Group Home

December 6, 2017

Of the four (4) samples:

- One sample exceeded 15 ppb for lead.
 Lead Range: ND to 116 ppb
- No sample exceeded 1,300 ppb for copper.
 Copper Range: ND to 70 ppb

Field Notes:

The exceedance was at fixture 01KC003 on the first floor, and the owner indicated the first floor was not flushed prior to the stagnation period. The daycare is on the second floor.

January 24, 2018, Follow-Up Sampling

Fixture 01KC003 sample:

The sample was 93 ppb for lead, which exceeded 15 ppb.

The sample was 90 ppb copper, which did not exceed 1,300 ppb.

Deeper Plumbing Samples, of the ten (10) samples:

- No sample exceeded 15 ppb for lead.
 Lead Range: ND to 2 ppb
- No sample exceeded 1,300 ppb for copper.
 Copper Range: ND to 100 ppb

Field Notes:

The flow from Fixture 01KC003 was minimal due to a blockage. The blockage broke free during sampling, and a portion of the blockage material was caught in the initial sample.

*Additional follow-up is needed. DEQ will contact the owner and provide assistance to mitigate the exposure.

Manley Early Childhood Center

November 18, 2017

Of the forty-nine (49) samples:

- Two samples exceeded 15 ppb for lead. Lead Range: ND to 111 ppb
- One sample exceeded 1,300 ppb for copper.
 Copper Range: ND to 2,420 ppb

Field Notes:

The exceedance for fixture KC038A in Room 106 was 111 ppb for lead.

The exceedance for fixture KCO40A in Room 105 was 26 ppb for lead and the room is being used for storage.

The exceedance for fixture DW022 next to Room 227 was 2,420 ppb for copper; this fixture was not flushed prior to the stagnation period.

January 26, 2018, Follow-Up Sampling

Fixture DW022 sample:

The sample was ND for lead.

The sample was 440 ppb copper, which did not exceed 1,300 ppb.

Deeper Plumbing Samples, of the ten (10) samples:

- All samples were ND for lead.
 Lead Range: ND to ND
- No sample exceeded 1,300 ppb for copper.
 Copper Range: ND to 160 ppb

January 26, 2018, Follow-Up Sampling

Fixture KC038A sample:

The sample was 8 ppb for lead, which did not exceed 15 ppb.

The sample was 80 ppb copper, which did not exceed 1,300 ppb.

Deeper Plumbing Samples, of the ten (10) samples:

- No sample exceeded 15 ppb for lead.
 Lead Range: ND to 3 ppb
- No sample exceeded 1,300 ppb for copper.
 Copper Range: ND to 70 ppb

January 26, 2018, Follow-Up Sampling

Fixture KC040A sample:

The sample was 3 ppb for lead, which did not exceed 15 ppb.

The sample was 110 ppb copper, which did not exceed 1,300 ppb.

Deeper Plumbing Samples, of the ten (10) samples:

- No sample exceeded 15 ppb for lead.
 Lead Range: ND to 3 ppb
- No sample exceeded 1,300 ppb for copper.
 Copper Range: ND to 190 ppb

Mott Early Childhood Learning

November 25, 2017

Of the fourteen (14) samples:

- One sample exceeded 15 ppb for lead.
 Lead Range: ND to 39 ppb
- No sample exceeded 1,300 ppb for copper.

Copper Range: ND to 960 ppb

Field Notes:

The exceedance was fixture 01WC013 outside Room 109. This fixture was not flushed prior to stagnation period.

January 25, 2018, Follow-Up Sampling

Fixture 01WC013 sample:

The sample was 12 ppb for lead, which did not exceed 15 ppb.

The sample was 400 ppb copper, which did not exceed 1,300 ppb.

Deeper Plumbing Samples, of the ten (10) samples:

- No sample exceeded 15 ppb for lead.
 Lead Range: ND to 2 ppb
- No sample exceeded 1,300 ppb for copper.

Copper Range: 60 to 80 ppb

Field Notes:

This water cooler hasn't been used since 2013. The facility has plans to replace it with a hydration station.