

# POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT

Honey Bee Palace Child Care Center



September 21, 2016

## INTRODUCTION

During the month of April, 2016, the Department of Licensing and Regulatory Affairs (DLARA) completed replacement of drinking water fixtures at Honey Bee Palace Child Care Center. 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, May 21, 2016, the Department of Environmental Quality and the DLARA 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 daycare facilities and schools in Flint. This work began in July, 2016.

## SAMPLING METHODS

### Fixture Sampling

There are 16 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

- The standard 'Fixture Sampling Method' with the minimum six-hour stagnation period was not possible for this facility due to consistent

water use needs for the residents. Sampling is representative of usual water use at the facility.

- Aerators had been checked during flushing activities on Friday May 20, 2016.
- Filters were removed prior to sampling.
- Sixty-four samples from sixteen fixtures were collected and sent to the lab for analysis.
- Thirty samples were collected from three specific fixtures and sent to the lab for analysis for deeper plumbing assessment.

## SAMPLING RESULTS

### Post-Fixture Replacement

May 21, 2016  
Of the 94 samples:

- Lead Range: Non-Detected (ND) to 7 parts per billion (ppb)
- Copper Range: ND to 400 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.

# Honey Bee Palace Child Care Center

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Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	ND	00BKC001	P1	Copper	110
Lead	ND	00BKC001	P2	Copper	ND
Lead	ND	00BKC001	F01	Copper	ND
Lead	ND	00BKC001	F02	Copper	ND
Lead	ND	00BBF002	P1	Copper	80
Lead	ND	00BBF002	P2	Copper	ND
Lead	ND	00BBF002	F01	Copper	ND
Lead	ND	00BBF002	F02	Copper	ND
Lead	ND	00BBF003	P1	Copper	130
Lead	ND	00BBF003	P2	Copper	70
Lead	ND	00BBF003	F01	Copper	ND
Lead	ND	00BBF003	F02	Copper	ND
Lead	ND	00BCF004	P1	Copper	110
Lead	ND	00BCF004	P2	Copper	ND
Lead	ND	00BCF004	F01	Copper	ND
Lead	ND	00BCF004	F02	Copper	ND
Lead	ND	001KC005	P1	Copper	ND
Lead	ND	001KC005	P2	Copper	ND
Lead	ND	001KC005	F01	Copper	ND
Lead	ND	001KC005	F02	Copper	ND
Lead	ND	001BF006	P1	Copper	110
Lead	ND	001BF006	P2	Copper	110
Lead	ND	001BF006	F01	Copper	ND
Lead	ND	001BF006	F02	Copper	ND
Lead	3	001CF007	P1	Copper	170
Lead	7	001CF007	P2	Copper	290
Lead	ND	001CF007	F01	Copper	60
Lead	ND	001CF007	F02	Copper	ND
Lead	ND	001BF008	P1	Copper	100
Lead	1	001BF008	P2	Copper	100
Lead	ND	001BF008	F01	Copper	ND
Lead	ND	001BF008	F02	Copper	ND
Lead	3	001CF009	P1	Copper	120
Lead	3	001CF009	P2	Copper	90
Lead	ND	001CF009	F01	Copper	ND
Lead	ND	001CF009	F02	Copper	ND
Lead	ND	001WC010	P1	Copper	400
Lead	ND	001WC010	P2	Copper	320
Lead	ND	001WC010	F01	Copper	ND
Lead	ND	001WC010	F02	Copper	80
Lead	ND	001WC011	P1	Copper	120
Lead	ND	001WC011	P2	Copper	110
Lead	ND	001WC011	F01	Copper	80
Lead	ND	001WC011	F02	Copper	90
Lead	ND	001BF012	P1	Copper	70
Lead	ND	001BF012	P2	Copper	ND

\* 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.

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May 21, 2016

Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	ND	001BF012	F01	Copper	ND
Lead	ND	001BF012	F02	Copper	ND
Lead	ND	001BF013	P1	Copper	70
Lead	ND	001BF013	P2	Copper	ND
Lead	ND	001BF013	F01	Copper	ND
Lead	ND	001BF013	F02	Copper	ND
Lead	ND	001CF014	P1	Copper	100
Lead	ND	001CF014	P2	Copper	ND
Lead	ND	001CF014	F01	Copper	ND
Lead	ND	001CF014	F02	Copper	ND
Lead	ND	001CF015	P1	Copper	100
Lead	ND	001CF015	P2	Copper	ND
Lead	ND	001CF015	F01	Copper	ND
Lead	ND	001CF015	F02	Copper	ND
Lead	ND	001KC016	P1	Copper	110
Lead	ND	001KC016	P2	Copper	ND
Lead	ND	001KC016	F01	Copper	ND
Lead	ND	001KC016	F02	Copper	ND
Lead	ND	00BKC001	CA1	Copper	ND
Lead	ND	00BKC001	CA2	Copper	ND
Lead	ND	00BKC001	CA3	Copper	ND
Lead	ND	00BKC001	CA4	Copper	ND
Lead	ND	00BKC001	CA5	Copper	ND
Lead	ND	00BKC001	CA6	Copper	ND
Lead	ND	00BKC001	CA7	Copper	ND
Lead	ND	00BKC001	CA8	Copper	ND
Lead	ND	00BKC001	CA9	Copper	ND
Lead	ND	00BKC001	CA10	Copper	ND
Lead	ND	001CF007	CB1	Copper	80
Lead	ND	001CF007	CB2	Copper	ND
Lead	ND	001CF007	CB3	Copper	ND
Lead	ND	001CF007	CB4	Copper	ND
Lead	ND	001CF007	CB5	Copper	ND
Lead	ND	001CF007	CB6	Copper	ND
Lead	ND	001CF007	CB7	Copper	ND
Lead	ND	001CF007	CB8	Copper	ND
Lead	ND	001CF007	CB9	Copper	ND
Lead	ND	001CF007	CB10	Copper	ND
Lead	ND	001KC016	CC1	Copper	ND
Lead	ND	001KC016	CC2	Copper	ND
Lead	ND	001KC016	CC3	Copper	ND
Lead	ND	001KC016	CC4	Copper	ND
Lead	ND	001KC016	CC5	Copper	ND
Lead	ND	001KC016	CC6	Copper	ND
Lead	ND	001KC016	CC7	Copper	ND
Lead	ND	001KC016	CC8	Copper	ND

\* 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.

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<b>Lead</b>	<b>Result (ppb)</b>	<b>Sample Description</b>	<b>Site Code</b>	<b>Copper</b>	<b>Result (ppb)</b>
Lead	ND	001KC016	CC9	Copper	ND
Lead	ND	001KC016	CC10	Copper	ND

\* 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.