Flint Schools Central Kitchen

305 Walnut Court Street | Flint, Michigan | 48503

Introduction

On Friday, October 2, 2015, the Department of Licensing and Regulatory Affairs (DLARA) and the Department of Environmental Quality (DEQ), collectively (Team), conducted a sampling assessment of the plumbing system at Flint Schools Central Kitchen to determine any potential lead and/or copper sources within the building.

The Team is in the process of replacing all drinking water fixtures in the building. Once replacements are completed, the Team will return and conduct an additional sampling assessment on the new fixtures.

The results of the October 2, 2015, sampling assessments are found below:

Water Service Information

An inspection of the water main from inside the building yielded a two-inch copper pipe.

Fixtures with Lead Levels Greater Than 15 Parts per Billion

Based on the sampling conducted, the following fixtures were found to have lead water level results greater than 15 parts per billion (ppb).¹

Location: Kitchen Faucet in Kitchen, Outer Wall of Refrigerator Room, (KC003)

Results: P1=121 parts per billion, P2=12 parts per billion

F01=1 part per billion, F02=non-detect

Location: Drinking Water Bubbler in Kitchen, North Wall, (DW002)

Results: P1=67 parts per billion, P2=20 parts per billion

F01=24 parts per billion, F02=8

Location: Kitchen Faucet in Kitchen, Island, North, (KC007) Results: P1=17 parts per billion, P2=25 parts per billion

F01=2 parts per billion, F02=non-detect

¹ After a 12-hour stagnation period, the Team collected four (4) samples at each of the fixtures identified. Two (2) initial, 125-milliter samples (P1 and P2), were collected immediately after turning on the tap. The water was then flushed for 30 seconds and a third, 125-milliter sample (F01) was collected. Finally, the water was flushed for another two minutes, and the fourth 125-milliter sample (F02) was collected. These samples were used to determine the impact of any lead sources in and around each specific fixture and its connecting plumbing.

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Consecutive Sampling Results

This consecutive sampling was used to determine the impact of any lead sources located deep in the supply plumbing of the building. Results of the consecutive sample monitoring are listed in the table below.

Consecutive Sample No.	1	2	3	4	5	6	7	8	9	10
LOCATION		LEAD I	RESULT	(PARTS	PER B	ILLION;	ND = NO	OT-DETE	ECTED)	
Kitchen, Northeast Kitchen Faucet (KC005)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Kitchen, Island Kitchen Faucet (KC009)	ND	2	1	ND	ND	ND	ND	ND	ND	ND

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Sample Number	Analyte	Result (mg/L)	Analyte	Result (mg/L)	Sample Description	Site Code	Site Code Description		
LF91944	Lead	0.000	Copper	0.08	KC005 CA1		First Sequential Sample		
LF91945	Lead	0.000	Copper	0.09	KC005	CA2	Second Sequential Sample		
LF91946	Lead	0.000	Copper	0.09	KC005	CA3	Third Sequential Sample		
LF91947	Lead	0.000	Copper	0.11	KC005	CA4	Forth Sequential Sample		
LF91948	Lead	0.000	Copper	0.11	KC005	CA5	Fifth Sequential Sample		
LF91949	Lead	0.000	Copper	0.09	KC005	CA6	Sixth Sequential Sample		
LF91950	Lead	0.000	Copper	0.08	KC005	CA7	Seventh Sequential Sample		
LF91951	Lead	0.000	Copper	0.06	KC005	CA8	Eigth Sequential Sample		
LF91952	Lead	0.000	Copper	0.06	KC005	CA9	Ninth Sequential Sample		
LF91953	Lead	0.000	Copper	0.06	KC005	CA10	Tenth Sequential Sample		
LF91954	Lead	0.000	Copper	0.08	KC009	CB1	First Sequential Sample		
LF91955	Lead	0.002	Copper	0.09	KC009	CB2	Second Sequential Sample		
LF91956	Lead	0.001	Copper	0.05	KC009	CB3	Third Sequential Sample		
LF91957	Lead	0.000	Copper	0.00	KC009	CB4	Forth Sequential Sample		
LF91958	Lead	0.000	Copper	0.00	KC009	CB5	Fifth Sequential Sample		
LF91959	Lead	0.000	Copper	0.00	KC009	CB6	Sixth Sequential Sample		
LF91960	Lead	0.000	Copper	0.00	KC009	CB7	Seventh Sequential Sample		
LF91961	Lead	0.000	Copper	0.00	KC009	CB8	Eigth Sequential Sample		
LF91962	Lead	0.000	Copper	0.00	KC009	CB9	Ninth Sequential Sample		
LF91963	Lead	0.000	Copper	0.00	KC009	CB10	Tenth Sequential Sample		
LF91964	Lead	0.121	Copper	0.53	KC003	P1	First Primary draw of 125 milliliters		
LF91965	Lead	0.012	Copper	0.52	KC003	P2	Second Primary draw of 125 milliliters		
LF91966	Lead	0.001	Copper	0.31	KC003	F01	Flush Sample taken 30 Seconds after Second		
LF91967	Lead	0.000	Copper	0.20	KC003	F02	Flush Sample taken 2 minutes after First		
LF91968	Lead	0.004	Copper	0.26	KC001	P1	First Primary draw of 125 milliliters		
LF91969	Lead	0.005	Copper	0.18	KC001	P2	Second Primary draw of 125 milliliters		
LF91970	Lead	0.002	Copper	0.09	KC001	F01	Flush Sample taken 30 Seconds after Second		
LF91971	Lead	0.001	Copper	0.07	KC001	F02	Flush Sample taken 2 minutes after First		
LF91972	Lead	0.014	Copper	0.31	KC006	P1	First Primary draw of 125 milliliters		
LF91973	Lead	0.005	Copper	0.39	KC006	P2	Second Primary draw of 125 milliliters		
LF91974	Lead	0.005	Copper	0.24	KC006	F01	Flush Sample taken 30 Seconds after Second		
LF91975	Lead	0.001	Copper	0.09	KC006	F02	Flush Sample taken 2 minutes after First		
LF91976	Lead	0.006	Copper	0.11	KC004	P1	First Primary draw of 125 milliliters		
LF91977	Lead	0.002	Copper	0.16	KC004	P2	Second Primary draw of 125 milliliters		
LF91978	Lead	0.000	Copper	0.22	KC004	F01	Flush Sample taken 30 Seconds after Second		
LF91979	Lead	0.000	Copper	0.13	KC004	F02	Flush Sample taken 2 minutes after First		

Note: Results of "Not Detected" have been converted to a numberical value of zero to allow for ease of sorting. Results in RED exceed 15 ppb for Lead or 1.3 ppm for Copper

1 ppb = 0.001 mg/L Sampling Date: November 1, 2015 Page 1

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Sample Number	Analyte	Result (mg/L)	Analyte	Result (mg/L)	Sample Description	Site Code	Site Code Description
LF91980	Lead	0.003	Copper	0.29	KC005	P1	First Primary draw of 125 milliliters
LF91981	Lead	0.001	Copper	0.22	KC005	P2	Second Primary draw of 125 milliliters
LF91982	Lead	0.000	Copper	0.12	KC005	F01	Flush Sample taken 30 Seconds after Second
LF91983	Lead	0.000	Copper	0.06	KC005	F02	Flush Sample taken 2 minutes after First
LF91984	Lead	0.004	Copper	0.20	KC009	P1	First Primary draw of 125 milliliters
LF91985	Lead	0.002	Copper	0.35	KC009	P2	Second Primary draw of 125 milliliters
LF91986	Lead	0.001	Copper	0.13	KC009	F01	Flush Sample taken 30 Seconds after Second
LF91987	Lead	0.000	Copper	0.00	KC009	F02	Flush Sample taken 2 minutes after First
LF91988	Lead	0.067	Copper	0.89	DW002	P1	First Primary draw of 125 milliliters
LF91989	Lead	0.020	Copper	0.46	DW002	P2	Second Primary draw of 125 milliliters
LF91990	Lead	0.024	Copper	0.71	DW002	F01	Flush Sample taken 30 Seconds after Second
LF91991	Lead	0.008	Copper	0.18	DW002	F02	Flush Sample taken 2 minutes after First
LF91992	Lead	0.017	Copper	0.00	KC007	P1	First Primary draw of 125 milliliters
LF91993	Lead	0.025	Copper	0.06	KC007	P2	Second Primary draw of 125 milliliters
LF91994	Lead	0.002	Copper	0.00	KC007	F01	Flush Sample taken 30 Seconds after Second
LF91995	Lead	0.000	Copper	0.00	KC007	F02	Flush Sample taken 2 minutes after First
LF91996	Lead	0.006	Copper	0.09	KC008	P1	First Primary draw of 125 milliliters
LF91997	Lead	0.005	Copper	0.19	KC008	P2	Second Primary draw of 125 milliliters
LF91998	Lead	0.000	Copper	0.00	KC008	F01	Flush Sample taken 30 Seconds after Second
LF91999	Lead	0.000	Copper	0.00	KC008	F02	Flush Sample taken 2 minutes after First

Note: Results of "Not Detected" have been converted to a numberical value of zero to allow for ease of sorting. Results in RED exceed 15 ppb for Lead or 1.3 ppm for Copper

1 ppb = 0.001 mg/L Sampling Date: November 1, 2015 Page 2