

# POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT REACH



September 8, 2016

## INTRODUCTION

During the week of April 21, 2016, the Department of Licensing and Regulatory Affairs completed replacement of drinking water fixtures at REACH. 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, 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. This work began in July, 2016.

## Water Main Description

An inspection from inside the building yielded a one inch copper line to the meter, one inch copper line through the building and two brass body gate valves.

## SAMPLING METHODS

### Fixture Sampling

There are five 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

- Twenty samples from five fixtures were collected and sent to the lab for analysis.
- Ten samples from one specific fixture were collected and sent to the lab for analysis for deeper plumbing assessment.

## SAMPLING RESULTS

### Post-Fixture Replacement

June 4, 2016

Of the 30 samples:

- Lead Range: Non-Detected (ND) to 227 parts per billion (ppb)
- Copper Range: ND to 1,010 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.*

REACH  
June 4, 2016

Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	ND	01KC001	P1	Copper	120
Lead	ND	01KC001	P2	Copper	60
Lead	ND	01KC001	F01	Copper	ND
Lead	50	01KC001	F02	Copper	60
Lead	18	02BF002	P1	Copper	1010
Lead	41	02BF002	P2	Copper	590
Lead	108	02BF002	F01	Copper	60
Lead	227	02BF002	F02	Copper	70
Lead	ND	01BF003	P1	Copper	80
Lead	ND	01BF003	P2	Copper	60
Lead	196	01BF003	F01	Copper	ND
Lead	143	01BF003	F02	Copper	ND
Lead	ND	01BF004	P1	Copper	330
Lead	1	01BF004	P2	Copper	190
Lead	ND	01BF004	F01	Copper	120
Lead	60	01BF004	F02	Copper	ND
Lead	2	02BF005	P1	Copper	150
Lead	2	02BF005	P2	Copper	ND
Lead	3	02BF005	F01	Copper	ND
Lead	38	02BF005	F02	Copper	ND
Lead	136	01KC001	A1	Copper	80
Lead	160	01KC001	A2	Copper	70
Lead	59	01KC001	A3	Copper	ND
Lead	27	01KC001	A4	Copper	ND
Lead	16	01KC001	A5	Copper	ND
Lead	12	01KC001	A6	Copper	ND
Lead	9	01KC001	A7	Copper	ND
Lead	6	01KC001	A8	Copper	ND
Lead	5	01KC001	A9	Copper	ND
Lead	3	01KC001	A10	Copper	ND