

POST-FIXTURE REPLACEMENT SAMPLING RESULTS REPORT

Thorn AFC Home



August 16, 2016

INTRODUCTION

During the month of April 2016, the Department of Licensing and Regulatory Affairs (DLARA) completed replacement of drinking water fixtures at Thorn AFC Home. 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.

SAMPLING METHODS

Fixture Sampling

There are four 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 a minimum six-hour stagnation period was not possible for this facility due to the residents' consistent water use needs. Sampling is representative of usual water use at the facility.

- Four fixtures, 16 samples, were collected and sent to the lab for analysis.
- One fixture was selected to test the deeper part of the plumbing system. For this method ten samples were collected and sent to the lab for analysis.

SAMPLING RESULTS

Post-Fixture Replacement

May 21, 2016
Of the 26 samples:

- Lead Range: All samples were Non-Detected (ND).
- Copper Range: ND to 120 parts per billion (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.



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May 21, 2016

Lead	Lead Result (ppb)	Sample Description	Site Code	Copper	Copper Result (ppb)
Lead	ND	01KC001	P1	Copper	100
Lead	ND	01KC001	P2	Copper	120
Lead	ND	01KC001	F01	Copper	60
Lead	ND	01KC001	F02	Copper	ND
Lead	ND	01BF002	P1	Copper	70
Lead	ND	01BF002	P2	Copper	50
Lead	ND	01BF002	F01	Copper	70
Lead	ND	01BF002	F02	Copper	ND
Lead	ND	02BF003	P1	Copper	80
Lead	ND	02BF003	P2	Copper	80
Lead	ND	02BF003	F01	Copper	ND
Lead	ND	02BF003	F02	Copper	ND
Lead	ND	02BF004	P1	Copper	70
Lead	ND	02BF004	P2	Copper	ND
Lead	ND	02BF004	F01	Copper	ND
Lead	ND	02BF004	F02	Copper	ND
Lead	ND	01KC001	CA1	Copper	60
Lead	ND	01KC001	CA2	Copper	ND
Lead	ND	01KC001	CA3	Copper	ND
Lead	ND	01KC001	CA4	Copper	ND
Lead	ND	01KC001	CA5	Copper	ND
Lead	ND	01KC001	CA6	Copper	ND
Lead	ND	01KC001	CA7	Copper	ND
Lead	ND	01KC001	CA8	Copper	ND
Lead	ND	01KC001	CA9	Copper	ND
Lead	ND	01KC001	CA10	Copper	ND

The result of non-detected (ND) means; for lead the amount in water is less than 1 pbb, for copper the amount in water is less than 50 pbb.