

INTRODUCTION

During the month of May, 2016, the Department of Licensing and Regulatory Affairs completed replacement of drinking water fixtures at Washington AFC 2. 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.

SAMPLING METHODS

Fixture Sampling

There are two drinking water fixtures and two bathroom 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 sample from bathroom fixture 02BF002 was not tested because there was insufficient volume to run the test.
- Two fixtures were selected to test the deeper part of the plumbing system.
 For this method ten samples were collected from each fixture and sent to the lab for analysis.

SAMPLING RESULTS

Post-Fixture Replacement

June 4, 2016 Of the 35 samples:

- Lead Range: Non-Detected (ND) to 37 parts per billion (ppb)
- Copper Range: All samples were ND

* 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.

Washington AFC 2 June 4, 2016

Lead	Result (ppb)	Sample Description	Site Code	Copper	Result (ppb)
Lead	ND	01BF001 1ST FLOOR BATH	P1	Copper	ND
Lead	2	01BF001 1ST FLOOR BATH	P2	Copper	ND
Lead	37	01BF001 1ST FLOOR BATH	F01	Copper	ND
Lead	2	01BF001 1ST FLOOR BATH	F02	Copper	ND
Lead	20	02BF002	P2	Copper	ND
Lead	5	02BF002	F01	Copper	ND
Lead	ND	02BF002	F02	Copper	ND
Lead	ND	01BF003	P1	Copper	ND
Lead	ND	01BF003	P2	Copper	ND
Lead	ND	01BF003	F01	Copper	ND
Lead	ND	01BF003	F02	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	P1	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	P2	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	F01	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	F02	Copper	ND
Lead	1	01BF001 1ST FLOOR BATH	CA1	Copper	ND
Lead	ND	01BF001 1ST FLOOR BATH	CA2	Copper	ND
Lead	ND	01BF001 1ST FLOOR BATH	CA3	Copper	ND
Lead	ND	01BF001 1ST FLOOR BATH	CA4	Copper	ND
Lead	ND	01BF001 1ST FLOOR BATH	CA5	Copper	ND
Lead	ND	01BF001 1ST FLOOR BATH	CA6	Copper	ND
Lead	ND	01BF001 1ST FLOOR BATH	CA7	Copper	ND
Lead	ND	01BF001 1ST FLOOR BATH	CA8	Copper	ND
Lead	ND	01BF001 1ST FLOOR BATH	CA9	Copper	ND
Lead	ND	01BF001 1ST FLOOR BATH	CA10	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	CB1	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	CB2	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	CB3	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	CB4	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	CB5	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	CB6	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	CB7	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	CB8	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	CB9	Copper	ND
Lead	ND	01KC004 KITCHEN SINK	CB10	Copper	ND