## INTRODUCTION

During the month of April, 2016, the Department of Licensing and Regulatory Affairs completed replacement of drinking water fixtures at Genesee Regional Crisis Residential Unit. 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, April 9, 2016, the Department of Environmental Quality conducted a post-fixture sampling assessment of the plumbing system at the facility.

### **Water Main Description**

An interior inspection of the water main identified a one and one half-inch copper main and one and one-half inch copper distribution.

### SAMPLING METHODS

### **Fixture Sampling**

There are ten 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

• Ten fixtures, 40 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.
- 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.

### **SAMPLING RESULTS**

#### **Post-Fixture Replacement**

April 9, 2016 Of the 50 samples:

- ➤ Lead Range: Non-Detected (ND) to 6 parts per billion (ppb)
- Copper Range: ND to 310 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.

# Genesee Regional Crisis Residential Unit April 9, 2016

Lead	Lead Result (ppb)	Sample Description	Site Code	Copper	Copper Result (ppb)
Lead	ND	01BF001	P1	Copper	140
Lead	ND	01BF001	P2	Copper	100
Lead	ND	01BF001	F01	Copper	ND
Lead	ND	01BF001	F02	Copper	ND
Lead	ND	01BF002	P1	Copper	220
Lead	2	01BF002	P2	Copper	130
Lead	ND	01BF002	F01	Copper	ND
Lead	ND	01BF002	F02	Copper	ND
Lead	1	01BF003	P1	Copper	170
Lead	1	01BF003	P2	Copper	120
Lead	ND	01BF003	F01	Copper	ND
Lead	ND	01BF003	F02	Copper	ND
Lead	ND	01BF004	P1	Copper	150
Lead	ND	01BF004	P2	Copper	100
Lead	ND	01BF004	F01	Copper	ND
Lead	ND	01BF004	F02	Copper	ND
Lead	1	01BF005	P1	Copper	180
Lead	2	01BF005	P2	Copper	140
Lead	1	01BF005	F01	Copper	70
Lead	ND	01BF005	F02	Copper	ND
Lead	1	01BF006	P1	Copper	190
Lead	2	01BF006	P2	Copper	170
Lead	ND	01BF006	F01	Copper	ND
Lead	ND	01BF006	F02	Copper	ND
Lead	2	01NS007	P1	Copper	250
Lead	6	01NS007	P2	Copper	310
Lead	1	01NS007	F01	Copper	80
Lead	ND	01NS007	F02	Copper	ND
Lead	ND	01KC008	P1	Copper	120
Lead	ND	01KC008	P2	Copper	ND
Lead	ND	01KC008	F01	Copper	ND
Lead	ND	01KC008	F02	Copper	ND
Lead	ND	01KC009	P1	Copper	90
Lead	ND	01KC009	P2	Copper	60
Lead	ND	01KC009	F01	Copper	ND
Lead	ND	01KC009	F02	Copper	ND
Lead	ND	01BF010	P1	Copper	190
Lead	ND	01BF010	P2	Copper	130
Lead	ND	01BF010	F01	Copper	ND
Lead	ND	01BF010	F02	Copper	ND
Lead	ND	01KC009	CA1	Copper	ND
Lead	ND	01KC009	CA2	Copper	ND
Lead	ND	01KC009	CA3	Copper	ND
Lead	ND	01KC009	CA4	Copper	ND
Lead	ND	01KC009	CA5	Copper	ND
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# Genesee Regional Crisis Residential Unit April 9, 2016

Lead	Lead Result (ppb)	Sample Description	Site Code	Copper	Copper Result (ppb)
Lead	ND	01KC009	CA6	Copper	ND
Lead	ND	01KC009	CA7	Copper	ND
Lead	ND	01KC009	CA8	Copper	ND
Lead	ND	01KC009	CA9	Copper	ND
Lead	ND	01KC009	CA10	Copper	ND