

INTRODUCTION

Regulatory Compliance Management (RCM) was retained by Schiller Park School District 81 to provide Lead in Drinking Water Sampling Services for two school buildings in Schiller Park, Illinois. Water samples were collected at the following buildings: John F. Kennedy Elementary School and Washington Elementary School. The fixtures to be tested were identified by District personnel. The initial round of lead in drinking water sampling services took place on December 19, 2017. Two additional rounds of sampling to evaluate the efficacy of remediation measures were conducted on January 19, 2018 and February 2, 2018. All sampling duties were performed by Mark Krupa and Emily Bixler. Sampling was conducted in accordance with the protocol established by the State of Illinois under 225 ILCS 320/35.5. Lead in drinking water analyses were performed by Microbac Laboratories, Inc., which is an Illinois Environmental Laboratory Accreditation Program (IL ELAP) certified lab, and is accredited to analyze lead in drinking water under the National Environmental Laboratory Accreditation Program (NELAP #200064). Results of analysis can be found within Section 2 of this report.

DISCUSSION

Prior to initiation of sampling, the Sampling Technicians reviewed the scope of work and developed a sampling plan based upon information provided by the client regarding the location of drinking fountains and sinks in each school. The client directed that sampling be conducted on specific drinking fountains, classroom sinks, and kitchen sinks used for food preparation throughout the six buildings.

Over the course of one morning, the Sampling Technicians collected samples from fourteen (14) fixtures at John F. Kennedy Elementary School and fourteen (14) fixtures at Washington Elementary School. A total of twenty-eight (28) fixtures were sampled. A summary of the sampling results can be found in Table 1.1.

Based on the results of the sampling performed on December 19, 2017, two (2) fixtures at John F. Kennedy Elementary School were found to have detectable lead levels in the first draw or second draw sample. The lead levels in the samples from both of these fixtures were below 5 ppb.

Five (5) fixtures at Washington Elementary School were found to have detectable lead levels in the first-draw or second draw sample. Of these five (5) fixtures, two (2) had detectable lead levels below 5 ppb. Two (2) fixtures had lead levels above 5 ppb but less than 20 ppb. One (1) fixture had samples with lead levels over 20 ppb.

Following the receipt of the results of the sampling performed on December 19, 2017, the District took steps to reduce the elevated lead concentrations that were found. These steps included the cleaning of aerators on faucets and the replacement of a drinking water fountain. A second round of sampling to evaluate the effectiveness of these measures took place on January 19, 2018. Three (3) fixtures at Washington Elementary School were sampled during this round of sampling.

Based on the results of the sampling performed on January 19, 2018, one (1) fixture at Washington Elementary School was found to have detectable lead levels in the first draw or second draw sample. The lead levels in the samples from this fixtures were above 5 ppb but less than 20 ppb.

In response to the results of the sampling performed on January 19, 2018, the District replaced the sprayer component on the faucet from which the sampled with the elevated lead concentration was collected. A third round of sampling was performed to evaluate the effectiveness of this measure took place on February 2, 2018. One (1) fixture at Washington Elementary School was sampled during this round of sampling.

Based on the results of the sampling performed on February 2, 2018, one (1) fixture at Washington Elementary School was found to have detectable lead levels in the first draw sample. The lead levels in the sample from this fixture were less than 5 ppb.

Table 1.1 Summary of Lead in Drinking Water Concentrations by Building Location, December 19, 2017

Building	Total Fixtures Sampled	Fixtures with No Detectable Lead	Fixtures ≤5 ppb	Fixtures >5 ppb, <20 ppb*	Fixtures >20 ppb*†
John F. Kennedy Elementary School	14	12	2	0	0
Washington Elementary School	14	9	2	2	1

**If any samples collected in a school exceed 5 ppb, individual notification to students' parents and guardians must be made.*

†EPA recommends remedial action be taken to reduce lead levels if a sample exceeds 20 ppb.

Table 1.2 Summary of Lead in Drinking Water Concentrations by Building Location, January 19, 2018

Building	Total Fixtures Sampled	Fixtures with No Detectable Lead	Fixtures ≤5 ppb	Fixtures >5 ppb, <20 ppb*	Fixtures >20 ppb*†
Washington Elementary School	3	2	0	1	0

**If any samples collected in a school exceed 5 ppb, individual notification to students' parents and guardians must be made.*

†EPA recommends remedial action be taken to reduce lead levels if a sample exceeds 20 ppb.

Table 1.3 Summary of Lead in Drinking Water Concentrations by Building Location, February 2, 2018

Building	Total Fixtures Sampled	Fixtures with No Detectable Lead	Fixtures ≤5 ppb	Fixtures >5 ppb, <20 ppb*	Fixtures >20 ppb*†
Washington Elementary School	1	0	1	0	0

**If any samples collected in a school exceed 5 ppb, individual notification to students' parents and guardians must be made.*

†EPA recommends remedial action be taken to reduce lead levels if a sample exceeds 20 ppb.