



Lead Testing in Drinking Water

Site:

Prairie Central Primary East
407 S. 4th Street
Chatsworth, IL 60921

Local Education Agency:

Prairie Central C.U.S.D. 8

Completion Date:

December 21, 2017

IDEAL Number:

21410B



Lead Testing in Drinking Water

Public Act 099-0922

Public Act 099-0922, was passed into law in January 2017. The Act requires the Local Education Agency (LEA) to test for lead in all water sources used for cooking and drinking in schools built on or before January 1, 2000, where more than 10 pre-kindergarten through 5th grade children are present. The timeframe for compliance is December 31, 2017, for buildings constructed prior to January 1, 1987; and December 31, 2018, for those built between January 2, 1987 and January 1, 2000. Water samples are required to be analyzed by a method approved by the Illinois Environmental Protection Agency (IEPA) that provides a minimum reporting limit of 2 parts per billion (ppb). Notifications are required. Mitigation may be required based on test results. A Water Quality Management Plan (WQMP) is required.

Scope of Service

On December 21, 2017, Ideal Environmental Engineering (IDEAL) performed water sampling at Prairie Central Primary East in Chatsworth, IL at the request of the LEA. IDEAL's scope of service was to provide testing and analysis for lead in drinking water in accordance with Illinois Public Act 099-0922 and to prepare and submit reports for the water testing to the LEA and IDPH.

This report is presented based on the Act. IDEAL's service excluded determining whether a tested building is subject to the Act. IDEAL recommends following the Act's requirements for all buildings tested, even if a building does not meet the Act's definition of a school building.

Sampling Methodology

Prior to sampling, in order to verify that the required 8-18 hour water stagnation period had been met, school personnel provided IDEAL's water collector with the date and time the plumbing system had last been used. The date and time provided are recorded on the chain of custody (COC).

The water source locations were provided to IDEAL by the LEA. For each source, a first-draw 250 milliliter (mL) sample of cold water was collected in a bottle provided by an IEPA-approved laboratory. A first-draw sample is the first amount of water collected from a source. After the first draw was collected, the source was flushed for 30 seconds, followed by the collection of a second-draw 250 mL sample of water. This second sample is called a flush sample. If multiple faucets use the same drain, only one second-draw (flush) sample may have been collected.

Each bottle was placed in a position that allowed for the collection of all of the water. Care was taken to prevent overflow. Each bottle was labeled with a unique identifier (sample ID). The sample ID was recorded on the COC, which lists the location of the sample, source of the sample, and the date and time the sample was collected.

The water bottles were delivered—with the COC to show the relinquishment and receipt of the samples—to an IEPA-accredited laboratory for analysis. The laboratory's accreditation was reviewed by IDEAL to ensure that it was current for an IEPA-approved method of analysis for lead in drinking water.



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Summary of Sampling

43 water samples were collected from 19 sources. All results are shown in Table 1.1.

Table 1.1: All Sample Results

Table 1.1 Sample ID	Sample Location Description	Fixture Type	Sample Type	Concentration
1 CHS	Hall by Gym (South End)	DF - Drinking Fountain	First Draw	ND
1 CHF	Hall by Gym (South End)	DF - Drinking Fountain	Flush	ND
2 CHS	Cafeteria	S - Sink	First Draw	ND
2 CHF	Cafeteria	S - Sink	Flush	ND
3 CHS	Kitchen - Food Sink - Sprayer	O - Other	First Draw	3.98 ppb
3 CHF	Kitchen - Food Sink - Sprayer	O - Other	Flush	2.09 ppb
4 CHS	Room 14	S - Sink	First Draw	9.37 ppb
4 CHF	Room 14	S - Sink	Flush	ND
5 CHS	Room 13	S - Sink	First Draw	357 ppb
5 CHF	Room 13	S - Sink	Flush	4.17 ppb
6 CHSa	Room 12 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	15.2 ppb
6 CHSb	Room 12 - Sink/Fountain Combo	S - Sink	First Draw	3.08 ppb
6 CHF	Room 12 - Sink/Fountain Combo	S - Sink	Flush	ND
7 CHS	Room 10	S - Sink	First Draw	4.73 ppb
7 CHF	Room 10	S - Sink	Flush	ND
8 CHS	Room 11 - Lounge	S - Sink	First Draw	8.23 ppb
8 CHF	Room 11 - Lounge	S - Sink	Flush	ND
9 CHSa	Room 9 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	5.88 ppb
9 CHSb	Room 9 - Sink/Fountain Combo	S - Sink	First Draw	ND
9 CHF	Room 9 - Sink/Fountain Combo	S - Sink	Flush	ND
10 CHS	Room 8	S - Sink	First Draw	2.98 ppb
10 CHF	Room 8	S - Sink	Flush	ND
11 CHS	Nurse Restroom	S - Sink	First Draw	ND
11 CHF	Nurse Restroom	S - Sink	Flush	ND
12 CHS	Room 6*	S - Sink	First Draw	ND
12 CHF	Room 6*	S - Sink	Flush	ND
13 CHS	Room 7	S - Sink	First Draw	24.0 ppb
13 CHF	Room 7	S - Sink	Flush	8.71 ppb
14 CHS	Room 5	S - Sink	First Draw	8.77 ppb
14 CHF	Room 5	S - Sink	Flush	3.30 ppb



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Table 1.1 Sample ID	Sample Location Description	Fixture Type	Sample Type	Concentration
15 CHS	Hall by Room 5	DF - Drinking Fountain	First Draw	ND
15 CHF	Hall by Room 5	DF - Drinking Fountain	Flush	ND
16 CHSa	Room 4 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	33.0 ppb
16 CHSb	Room 4 - Sink/Fountain Combo	S - Sink	First Draw	6.56 ppb
16 CHF	Room 4 - Sink/Fountain Combo	S - Sink	Flush	2.52 ppb
17 CHSa	Room 3 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	5.71 ppb
17 CHSb	Room 3 - Sink/Fountain Combo	S - Sink	First Draw	4.80 ppb
17 CHF	Room 3 - Sink/Fountain Combo	S - Sink	Flush	ND
18 CHSa	Room 2 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	15.0 ppb
18 CHSb	Room 2 - Sink/Fountain Combo	S - Sink	First Draw	ND
18 CHF	Room 2 - Sink/Fountain Combo	S - Sink	Flush	ND
19 CHS	Room 1	S - Sink	First Draw	3.28 ppb
19 CHF	Room 1	S - Sink	Flush	ND
ND = None Detected				

*The fixture in Room 6 is a Sink/Fountain Combo; however, the fountain does not work, and will be taken out of service.



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Notifications

Notification Requirements:

The Illinois Department of Public Health (IDPH) must be informed of the results. The LEA is also required to provide notification of all water testing results to parents and legal guardians of all enrolled students. Notification can be done, at a minimum, on the school's website. In addition, when any test result exceeds 5 ppb, individual written or electronic notification is required to be sent to parents and legal guardians of all enrolled students and must include the location and source exceeding 5 ppb, and the USEPA website for information about lead in drinking water: www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water

Based on sample results:

- Submit to IDPH at dph.leadh2O@illinois.gov all sample results as shown in Table 1.1. This step has been done by IDEAL. Please refer to Appendix A for electronic transmittal(s).
- Provide to parents and legal guardians all sample results as shown in Table 1.1. This can be done, at a minimum, on the school's website.
- Provide individual written or electronic notification to parents and legal guardians of all enrolled students the sample results in Table 2.1, as these results exceed 5 ppb. Include in the notification the location and source exceeding 5 ppb, and the USEPA website for information about lead in drinking water: www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

Refer to Appendix B for a sample notification letter for results exceeding 5 ppb.

Table 2.1: Results over 5 ppb

Table 2.1 Sample ID	Sample Location Description	Fixture Type	Sample Type	Concentration
4 CHS	Room 14	S - Sink	First Draw	9.37 ppb
5 CHS	Room 13	S - Sink	First Draw	357 ppb
6 CHSa	Room 12 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	15.2 ppb
8 CHS	Room 11 - Lounge	S - Sink	First Draw	8.23 ppb
9 CHSa	Room 9 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	5.88 ppb
13 CHS	Room 7	S - Sink	First Draw	24.0 ppb
13 CHF	Room 7	S - Sink	Flush	8.71 ppb
14 CHS	Room 5	S - Sink	First Draw	8.77 ppb
16 CHSa	Room 4 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	33.0 ppb
16 CHSb	Room 4 - Sink/Fountain Combo	S - Sink	First Draw	6.56 ppb
17 CHSa	Room 3 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	5.71 ppb
18 CHSa	Room 2 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	15.0 ppb

