



Lead Testing in Drinking Water

Site:

Prairie Central Elementary School
600 S. 1st Street
Fairbury, IL 61739

Local Education Agency:

Prairie Central C.U.S.D. 8

Completion Date:

December 21, 2017

IDEAL Number:

21410A



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 Elementary School in Fairbury, 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

73 water samples were collected from 31 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
5 FS	Room 32*	S - Sink	First Draw	2.86 ppb
5 FF	Room 32*	S - Sink	Flush	ND
1 FS	Hall by Custodial Room 20	DF - Drinking Fountain	First Draw	ND
1 FF	Hall by Custodial Room 20	DF - Drinking Fountain	Flush	ND
2 FSa	Room 31 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	ND
2 FSb	Room 31 - Sink/Fountain Combo	S - Sink	First Draw	ND
2 FF	Room 31 - Sink/Fountain Combo	S - Sink	Flush	ND
3 FSa	Room 30 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	ND
3 FSb	Room 30 - Sink/Fountain Combo	S - Sink	First Draw	ND
3 FF	Room 30 - Sink/Fountain Combo	S - Sink	Flush	ND
4 FSa	Room 29 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	ND
4 FSb	Room 29 - Sink/Fountain Combo	S - Sink	First Draw	ND
4 FF	Room 29 - Sink/Fountain Combo	S - Sink	Flush	ND
6 FS	Room 27*	S - Sink	First Draw	ND
6 FF	Room 27*	S - Sink	Flush	ND
7 FS	Room 26*	S - Sink	First Draw	ND
7 FF	Room 26*	S - Sink	Flush	ND
8 FSa	Room 24 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	ND
8 FSb	Room 24 - Sink/Fountain Combo	S - Sink	First Draw	ND
8 FF	Room 24 - Sink/Fountain Combo	S - Sink	Flush	ND
9 FS	Room 23*	S - Sink	First Draw	3.18 ppb
9 FF	Room 23*	S - Sink	Flush	ND
10 FS	Hall Across from Room 33 - Right	DF - Drinking Fountain	First Draw	ND
10 FF	Hall Across from Room 33 - Right	DF - Drinking Fountain	Flush	ND
11 FS	Hall Across from Room 33 - Left	DF - Drinking Fountain	First Draw	ND
11 FF	Hall Across from Room 33 - Left	DF - Drinking Fountain	Flush	ND
12 FSa	Kitchen - 2 Compartment Sink - Right	KS - Kitchen Sink	First Draw	ND
12 FSb	Kitchen - 2 Comp. Sink - Sprayer - Right	O - Other	First Draw	ND
12 FF	Kitchen - 2 Compartment Sink - Right	KS - Kitchen Sink	Flush	ND



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Table 1.1 Sample ID	Sample Location Description	Fixture Type	Sample Type	Concentration
13 FS	Kitchen - 2 Compartment Sink - Left	KS - Kitchen Sink	First Draw	ND
13 FF	Kitchen - 2 Compartment Sink - Left	KS - Kitchen Sink	Flush	ND
14 FS	Kitchen - Island Sink	KS - Kitchen Sink	First Draw	ND
14 FF	Kitchen - Island Sink	KS - Kitchen Sink	Flush	ND
15 FS	Room 14	S - Sink	First Draw	ND
15 FF	Room 14	S - Sink	Flush	ND
16 FS	Room 12*	S - Sink	First Draw	ND
16 FF	Room 12*	S - Sink	Flush	ND
17 FS	Room 11*	S - Sink	First Draw	ND
17 FF	Room 11*	S - Sink	Flush	ND
18 FSA	Room 10 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	ND
18 FSB	Room 10 - Sink/Fountain Combo	S - Sink	First Draw	ND
18 FF	Room 10 - Sink/Fountain Combo	S - Sink	Flush	ND
19 FS	Room 9*	S - Sink	First Draw	ND
19 FF	Room 9*	S - Sink	Flush	ND
20 FSA	Room 8 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	ND
20 FSB	Room 8 - Sink/Fountain Combo	S - Sink	First Draw	ND
20 FF	Room 8 - Sink/Fountain Combo	S - Sink	Flush	ND
21 FS	Room 7*	S - Sink	First Draw	ND
21 FF	Room 7*	S - Sink	Flush	ND
22 FSA	Room 6 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	ND
22 FSB	Room 6 - Sink/Fountain Combo	S - Sink	First Draw	ND
22 FF	Room 6 - Sink/Fountain Combo	S - Sink	Flush	ND
23 FS	Room 5*	S - Sink	First Draw	ND
23 FF	Room 5*	S - Sink	Flush	ND
24 FS	Lounge	S - Sink	First Draw	ND
24 FF	Lounge	S - Sink	Flush	ND
25 FS	Room 1C - Nurse Office	S - Sink	First Draw	ND
25 FF	Room 1C - Nurse Office	S - Sink	Flush	ND
26 FS	Room 42*	S - Sink	First Draw	ND
26 FF	Room 42*	S - Sink	Flush	ND
27 FSA	Room 41 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	ND
27 FSB	Room 41 - Sink/Fountain Combo	S - Sink	First Draw	ND



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Table 1.1 Sample ID	Sample Location Description	Fixture Type	Sample Type	Concentration
27 FF	Room 41 - Sink/Fountain Combo	S - Sink	Flush	ND
28 FS	Room 40*	S - Sink	First Draw	2.69 ppb
28 FF	Room 40*	S - Sink	Flush	ND
29 FSa	Room 39 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	ND
29 FSb	Room 39 - Sink/Fountain Combo	S - Sink	First Draw	5.20 ppb
29 FF	Room 39 - Sink/Fountain Combo	S - Sink	Flush	ND
30 FS	Room 38*	S - Sink	First Draw	ND
30 FF	Room 38*	S - Sink	Flush	ND
31 FSa	Room 37 - Sink/Fountain Combo	DF - Drinking Fountain	First Draw	ND
31 FSb	Room 37 - Sink/Fountain Combo	S - Sink	First Draw	ND
31 FF	Room 37 - Sink/Fountain Combo	S - Sink	Flush	ND
ND = None Detected				

*Fixtures are all Sink/Fountain Combos; however, the fountains do not work and will be taken out of service.

