ENVIRONMENTAL CONSULTANTS, LLC



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November 1, 2017

Ms. Dee Scott, Superintendent Casey-Westfield Community Unit School District #4 502 East Delaware Street Casey, Illinois 62420

Results of Drinking Water Testing for Lead Content

Site(s): Monroe Elementary School

> 300 East Monroe Casey, Illinois 62420

Dear Ms. Scott,

On the morning of October 24, 2017, Environmental Consultants, LLC (EC) performed lead testing of multiple water sources at the Monroe Elementary School located at 300 East Monroe in Casey, Illinois. Sampling was performed by trained and licensed personnel in accordance with USEPA, HUD and State of Illinois Regulations and Guidelines.

All inspectors involved with sampling activities had EPA approved training in Lead. Certifications for our firm and the inspector collecting the samples is included as Appendix C to this document.

All samples were collected on a "first draw" basis. "First draw" is achieved by allowing the water system to rest for at least eight hours prior to sampling in order to collect any existing debris or settlement within the sample. The intent of this sampling is to replicate "worst case scenario" conditions. As such, EC inspectors met at the school at 6:00 a.m. to collect water samples before the systems were used by staff or students. A second sample from each water source was collected as a "follow up" sample basis. "Follow-up" sampling is achieved by allowing the water system to run for thirty (30) seconds after the first draw sampling. The intent of this sampling is to determine if lead contamination may be in the water lines connected to the water sources and not just at the fixture. Sampling was completed in accordance with the Illinois Senate Bill 550 requirements. The Illinois Department of Public Health (IDPH) and other regulatory agencies recommend that water sources run for at least thirty seconds and as long as two minutes prior to use to avoid settling within the water system.

Drinking water samples were collected from twenty-seven (27) different locations throughout Monroe Elementary School during the sampling event. The water samples were collected from drinking fountains and sinks potentially utilized for cooking or drinking activities at the campus. After sample collection, samples were immediately iced down and delivered to Teklab, Inc. located in Collinsville, Illinois following strict chain of custody procedures. Teklab is a NELAP accredited and State of Illinois licensed laboratory specializing in drinking water analysis. Detailed sampling locations and sample results are located in Appendix A of this report.

The analytical sensitivity utilized for the analysis of the water samples submitted identified a reporting limit (RL) of 1.0 micrograms per liter (µg/L). The analytical sensitivity utilized for the analysis of the water samples submitted identified a reporting limit (RL) of 1.0 microgram of lead per liter (µg/L). This reporting value equates to 1.0 parts per billion (ppb) of lead. The USEPA action level for lead in drinking water is 15.0 ppb for PSW. The USEPA document titled "Lead in Drinking Water at Schools and Child Care Facilities" last updated November 9, 2015 identifies an action level for drinking water collected from a plumbing fixture as 20.0 ppb. Fifty-two (52) of the fifty-four (54) samples collected from the selected locations at the Monroe Elementary School reported sample results which were less than the USEPA action level. This information can be found under the National Primary Drinking Water Regulations provided by the EPA, CFR 2010 Title 40. (See Appendix A and B for Sample Results)

The following results are greater than the action level.

"First Draw" Sampling

Sample ID 10 Room #35 - Sink (20.1 ppb) Sample ID 19 Room #72 - Sink (45.6 ppb)

At this time all water sources testing at 15 ppb or above should be removed from service. These sources are subject to additional maintenance activities and response actions prior to use. Before being put back in service, EC recommends these sources be re-tested to confirm compliance with acceptable levels. In addition, all sources will be subject to an ongoing maintenance program and re-testing at appropriate intervals. Any samples reported over 10 ppb should be re-sampled on an annual basis at a minimum.

Although no additional samples were identified above the USEPA action level, EC recommends that all water sources run for at least thirty seconds prior to use as recommended by the USEPA.

The following results require written notification per the Illinois Senate Bill 550 for samples reported above 5 ppb.

Sample 01	Kitchen Island – Hand Sink	(8.2 ppb)
Sample 02	Kitchen 2-Bay Sink	(6.9 ppb)
Sample 06	Room #36 – Sink	(5.1 ppb)
Sample 07	Room #37 – Sink	(10.7 ppb)
Sample 12	Room #32 – Sink	(9.9 ppb)
Sample 13	Room #33 – Sink	(5.0 ppb)
Sample 14A	Hallway outside Room 71 - Fountain	(6.4 ppb)
Sample 17	Nurse's Office – Drinking Fountain	(6.7 ppb)
Sample 17A	Nurse's Office – Drinking Fountain	(8.2 ppb)
Sample 20	Hallway outside Room 87 - Fountain	(11.0 ppb)
Sample 20A	Hallway outside Room 87 - Fountain	(11.1 ppb)
Sample 21A	Hallway outside Room 99 - Fountain	(6.5 ppb)

EC is pleased to provide this information to Casey-Westfield Community Unit School District #4 and we appreciate the opportunity to provide quality environmental consulting services. Please call us at (618) 343-3590 if you have any questions or to arrange a meeting to discuss.

Sincerely,

Environmental Consultants, LLC

Jim Yasitis Principal

TABLE 1

Drinking Water Sampling for Lead Content Casey-Westfield Community Unit School District #4 Monroe Elementary School

Sampled: October 24, 2017

Sample ID	Location	Water Source	Results (ppb)
01	Kitchen Island	Hand Sink	8.2
01A	Kitchen Island	Hand Sink	4.7
02	Kitchen – 2 Bay	Sink	6.9
02A	Kitchen – 2 Bay	Sink	2.0
03	Outside Music Room	Fountain	<1.0
03A	Outside Music Room	Fountain	1.1
04	Outside Gym (South)	Fountain	1.4
04A	Outside Gym (South)	Fountain	1.7
05	Outside Gym (North)	Fountain	<1.0
05A	Outside Gym (North)	Fountain	<1.0
06	Room 36	Sink	5.1
06A	Room 36	Sink	<1.0
07	Room 37	Sink	10.7
07A	Room 37	Sink	<1.0
08	Outside Room 37 (left)	Fountain	<1.0
08A	Outside Room 37 (left)	Fountain	1.4
09	Outside Room 37 (right)	Fountain	<1.0
09A	Outside Room 37 (right)	Fountain	<1.0
10	Room 35	Sink	20.1
10A	Room 35	Sink	1.4
11	Room 34	Sink	1.5
11A	Room 34	Sink	<1.0
12	Room 32	Sink	9.9
12A	Room 32	Sink	<1.0
13	Room 33	Sink	5.0
13A	Room 33	Sink	<1.0
14	Outside Room 71	Fountain	3.6
14A	Outside Room 71	Fountain	6.4
15	Outside Room 73	Fountain	1.6
15A	Outside Room 73	Fountain	3.4
16	Nurse's Office	Sink	3.7
16A	Nurse's Office	Sink	3.7
17	Nurse's Office	Fountain	6.7
17A	Nurse's Office	Fountain	8.2
18	Room 74	Sink	4.1
18A	Room 74	Sink	3.6
19	Room 72	Sink	45.6

Sample ID	Location	Water Source	Results (ppb)
19A	Room 72	Sink	4.4
20	Outside Room 87	Fountain	11.0
20A	Outside Room 87	Fountain	11.1
21	Outside Room 99	Fountain	3.0
21A	Outside Room 99	Fountain	6.5
22	Outside Room 96	Fountain	3.5
22A	Outside Room 96	Fountain	4.7
23	Outside Room 92	Fountain	3.4
23A	Outside Room 92	Fountain	4.0
24	Outside Boys' Restroom by Room 103	Fountain	<1.0
24A	Outside Boys' Restroom by Room 103	Fountain	<1.0
25	Outside Girls' Restroom by Room 105	Fountain	<1.0
25A	Outside Girls' Restroom by Room 105	Fountain	<1.0
26	Outside Room 120 (left)	Fountain	<1.0
26A	Outside Room 120 (left)	Fountain	<1.0
27	Outside Room 120 (right)	Fountain	<1.0
27A	Outside Room 120 (right)	Fountain	<1.0

A/B Samples were precautionary samples collected at 30 seconds following the "first draw" samples (A) and 3 minutes following the A sample (B).

#####	Water sources in excess of 20 ppb. Recommendation is to remove from service
	immediately. Do not return to service until re-testing confirms mitigation was
	effective.

Water source is < 20 ppb, but still displays evidence of lead. Recommendation is to re-test source on an annual basis at a minimum