



ENVIRONMENTAL CONSULTANTS, LLC

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November 9, 2017

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

Subject: Results of Drinking Water Re-Testing for Lead Content

**Site(s): Monroe Elementary School
300 East Monroe
Casey, Illinois 62420**

Dear Ms. Scott,

On the morning of November 3, 2017, Environmental Consultants, LLC (EC) performed lead re-sampling of twelve (12) water sources at the Mulberry Grove Elementary School located at 801 West Wall Street in Mulberry Grove, Illinois. The retest sampling was completed on six water sources that were reported above 5 ppb in previous sampling. Sampling was performed by trained and licensed personnel in accordance with USEPA, HUD and State of Illinois Regulations and Guidelines. Inspectors involved with sampling activities had EPA approved training in Lead. Certifications for our firm and the inspector collecting the samples is included within 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 twelve (12) 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 ($\mu\text{g/L}$). 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 ($\mu\text{g/L}$). 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. **Fifteen (15) of the sixteen (16) 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 19R Room #72 - Sink (41.6 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.

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
Re-Sampled: November 3, 2017**

Sample ID	Location	Water Source	Results (ppb)
01R	Kitchen Island	Hand Sink	5.4
02R	Kitchen – 2 Bay	Sink	6.1
06R	Room 36	Sink	10.8
07R	Room 37	Sink	5.4
10R	Room 35	Sink	11.8
12R	Room 32	Sink	10.5
13R	Room 33	Sink	3.5
14R	Outside Room 71	Fountain	1.2
14RA	Outside Room 71	Fountain	2.1
17R	Nurse's Office	Fountain	5.8
17RA	Nurse's Office	Fountain	2.8
19R	Room 72	Sink	41.6
20R	Outside Room 87	Fountain	4.4
20RA	Outside Room 87	Fountain	7.7
21R	Outside Room 99	Fountain	6.8
21RA	Outside Room 99	Fountain	5.3

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

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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.

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