



RESULTS OF WATER TESTING FOR LEAD CONTENT

Presented to the Board Of Education

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INTRODUCTION



- ❑ In response to national events and increased awareness, Saint Louis Public Schools (SLPS) authorized Environmental Consultants, LLC (EC) to perform lead testing of water sources throughout active school buildings within the District. Initial sampling began on March 2, 2016, and all active school buildings were screened prior to the start of the 2016-2017 school year.
- ❑ Sampling was performed by trained and licensed personnel in accordance with Federal, State and Local regulations. EC is licensed by the Missouri Department of Health and Senior Services (MDHSS) as a Lead Abatement Contractor authorized to perform water testing services and has been with the District since 2007.

BACKGROUND



- ❑ SLPS began remediation of lead-based paint within its schools in 2001 and has continued to address lead hazards throughout recent bond issues. “Child Occupied Areas” – defined as classrooms and common spaces associated with students under the age of seven (7) are part of the District’s Lead Abatement Program and are subject to routine inspections and interim controls in accordance with Federal regulations.
- ❑ The United States Environmental Protection Agency (USEPA) regulates the nation’s drinking water in public water supplies (PWS) under the Safe Drinking Water Act (SDWA).
- ❑ The USEPA estimates that approximately 10,000 schools and childcare facilities maintain their own water supply. USEPA further estimates approximately 90,000 public schools are not regulated under the SDWA – this includes SLPS. As a proactive approach to protecting students and staff, SLPS voluntarily agreed to test drinking water sources at all active schools for lead content.



METHODOLOGY, REPORTING, AND ALLOWABLE STANDARDS

- ❑ Sources of potable water that may be used as drinking water by students and staff within all active school buildings were sampled for lead content. Potential sources include drinking fountains and sinks. Sinks associated with kitchens and teacher lounges were included during sampling.
- ❑ The sampling timeline was prioritized to address children under the age of seven (7). The first areas to be tested were the Parent Infant Interactive Programs (PIIP) at Roosevelt, Sumner, and Vashon. The Early Childhood Centers at Stix and Wilkinson followed the PIIP facilities. Upon completion, the elementary schools, middle schools and high schools were then tested.
- ❑ All samples were collected on a “first draw” basis. “First draw” is achieved by allowing the water system to rest for at least six 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.

METHODOLOGY, REPORTING, AND ALLOWABLE STANDARDS



- ❑ After sample collection, samples were immediately delivered to Teklab, Inc. located in Collinsville, Illinois following strict chain of custody procedures. Teklab is a NELAP and State of Missouri accredited laboratory specializing in drinking water analysis. Certifications are available on request.
- ❑ The USEPA action level for lead in drinking water is 15.0 ppb for PWS. 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. As a precautionary measure to ensure public safety, SLPS has set an internal action level of 10.0 ppb.
- ❑ The stricter action level set forth by SLPS is intended as a screening tool to allow the facilities team to better proactively manage water sources within their buildings. As corrosion of plumbing lines is an ongoing concern, utilizing a stricter internal action level allows the facilities team to focus on faulty systems before they deteriorate into major problems.

SUMMARY OF RESULTS 2021



- ❑ In 2016 and 2019, the District sampled drinking water sources as part of its Risk Management program at all active school buildings. Approximately 7 percent of the 900 water sources district-wide required remediation.
- ❑ Follow up retesting of select water sources (i.e. water sources that required remediation) were conducted in the Summer 2021 and all drinking water sources are scheduled for testing in 2022.
- ❑ No drinking water source will be available for public use until sample results meet SLPS expectations.

SUMMARY OF RESULTS 2021



❑ 2021 Test Results Indicated:

- ❑ Total number of active school buildings: 66 (+6 admin buildings)
- ❑ Total number of water sources tested: 64
 - ❑ 47 sinks
 - ❑ 17 drinking fountains
- ❑ Initial number of water sources that failed: 9
 - ❑ 6 sinks failed
 - ❑ Sources reported at 20 ppb or greater: 4
 - ❑ Sources reported at >10 ppb to 19.9 ppb: 2
 - ❑ 3 drinking fountains failed
 - ❑ Sources reported at 20 ppb or greater: 0
 - ❑ Sources reported at >10 ppb to 19.9 ppb: 3



LEAD LEVEL CLASSIFICATIONS

- ❑ SLPS has classified all water sources into three priorities. Listed below are the priority classifications set forth by SLPS:
 - ❑ **Priority 1 – Sources over 20 ppb**
 - ❑ Remove from service
 - ❑ Identify source of lead content
 - ❑ Make repairs
 - ❑ Retest source prior to use
 - ❑ Retest annually
 - ❑ **Priority 2 – Sources over 10 ppb**
 - ❑ Remove from service
 - ❑ If re-test remains over 10 ppb, follow Priority 1 protocols
 - ❑ **Priority 3 – Sources under 10 ppb**
 - ❑ Inspect and place on routine preventative maintenance program. Re-test in 3 years or when conditions change.

PRIORITY 1 AND 2 RESULTS BY SCHOOL



- Out of sixty-six (66) schools and six (6) admin buildings within SLPS, there were a total of nine (9) failed sources in seven (7) buildings that were in excess of the internal action of 10 ppb. Follow-up testing occurred after response action were taken prior to any use.

SCHOOL	WATER SOURCE	INITIAL TESTING DATE	RESULT (PPB)	Retest Results	STATUS
Carver	Fountain - Outside Room 101	6/8/2021	16.0	2.2	Passed Retest
Laclede	Sink – Nurse’s Office	6/29/2021	135	1.0	Passed Retest
McKinley	Sink - Pot Filler- Center	6/10/2021	10.0	1.0	Passed Retest
Peabody	Fountain – Outside room 309	6/09/2021	17.2	1.0	Passed Retest
Shenandoah	Sink Kitchen – 2 Bay left	6/10/2021	22.4	6.2	Passed Retest
Shenandoah	Sink Kitchen – 2 Bay Right	6/10/2021	20.3	6.8	Passed Retest
Shenandoah	Sink Kitchen – Hand wash	6/10/2021	16.1	6.4	Passed Retest
Stevens	Fountain – Outside 119	6/9/2021	10.3	2.3	Passed Retest
Sumner	Sink – Room 112 – Station 3	7/19/2021	29.0	1.0	Passed Retest



CONCLUSION

- ❑ 2016 was the first year we conducted lead water testing. As a result, we had 88 water sources to fail requiring them to be retested every year.
- ❑ In 2019, during our 3-year inspection of all buildings, we had 64 failed water sources. Out of the 64, only 3 were repeat failures from 2016.
- ❑ In 2021, we retested all 64 water sources and 9 failed. Of the 9 failed water sources, repairs were made to all 9. As of today, all water sources have been retested and returned to service after passing.



QUESTIONS