

Stanberry R-II School District District Water Testing Plan June-July 2023



In accordance with the Missouri State Legislation, "Get the Lead Out of School Drinking Water Act", all districts in Missouri are required to conduct a water quality test of their facilities. The Stanberry R-II School District has developed a plan in order to ensure that the quality of our drinking sources meet the standards set by the state legislature. Below is a timeline of procedures taken by the school district, the results of the testing, remediation steps, and final test results.

Planning Phase: Late May

The maintenance director and superintendent of schools conducted a physical walkthrough of the building to create an inventory of the outlets used for human consumption, such as drinking fountains, kitchen faucets, and ice machines. Each source of water was identified on the facilities map in order to determine the number of water samples and location of each source. A copy of the facilities map has not been provided with this plan but may be seen by the public by calling the school district.

Selection of a certified testing laboratory was chosen during the planning process. Keystone Laboratories in Iowa was selected as the laboratory for our water analysis. This lab was selected based upon factors such as proximity to Stanberry, pricing, speed of return, communications, and certification. Keystone is a certified laboratory in the states of Iowa, Kansas, and Missouri. A link to their website with information and certifications has been provided for further analysis: <https://www.keystonelabs.com>

Testing Phase: Early June

The testing of the water samples were conducted by the maintenance director and superintendent. Prior to testing, training was conducted to ensure sampling procedures were fully executed. Training videos provided by the Missouri Department of Natural Resources were viewed and an extensive study of EPA's "3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities - A Training, Testing, and Taking Action Approach" was conducted. For more a copy of this document and more information, please visit the following link:

<https://www.epa.gov/system/files/documents/2021-07/epa-3ts-guidancedocument-english.pdf>

Procedures for initial outlet samples are shown below:

1. All samples were collected before the facility opened and before the fixtures had been used (EPA recommends an 8-18 hour stagnation period).
2. One 250-mL sample was taken at each fixture. Guidelines provided by the EPA to test various water sources were followed.
3. Each sample was labeled with the type of outlet and location within the building.
4. Each sample was securely placed into the Keystone Laboratories return mailing package and sent to the facility within the 10-day return policy. The samples were taken and sent to Keystone Laboratories on June 8, 2023.

Results:

The school district received the testing results from Keystone on June 22, 2023. The results indicated that the average lead level within all water sources at Stanberry averaged less than 1.5 ppb. Many samples registered lead amounts smaller than .5 ppb, which is far below the allowable limit set by state legislation. Out of the 34 samples taken, two samples registered a ppb greater than 5.0ppb - a classroom faucet and an ice machine. Given this information, a remediation plan was developed to address these two areas.

Remediation Plan:

Classroom Sink Faucet - After careful analysis of the sink faucet, it was determined that the cause of the increased lead level was due to the sink faucet. This conclusion was reached because the water line for the classroom sink is the same water line as the adjacent classroom...the adjacent classroom sink registered a 2.1 ppb lead test. The sink faucet was replaced and the follow-up test sample indicated a less than 0.4 reading. No further remediation is needed due to the low reading.

Ice Machine - Following a phone consultation visit with the Missouri Department of Natural Resources, it was determined that the most likely cause of the increased lead level in the ice machine was due to inactivity of the water source. The ice machine had not been used since May 17, 2023, the last day of the 2022-23 school year. The water test sample for the ice machine was not taken from the ice itself, but rather the water line that runs into the ice machine. The water in the line would have been stagnant for almost a month. Even with this information, it was decided to relocate the ice machine into the kitchen, using the same water line that tested 1.2 ppb level. After remediation and follow-up testing, the new ice machine location in the kitchen indicated a less than 0.4 reading. No further remediation is needed due to the low reading.

Final Test Results:

The initial testing and remediation testing indicated that all drinking outlets used for human consumption tested met the standards set by the state legislature. The school district will continue to ensure that the water quality of our facility is maintained and will retest within the guidelines set by the state legislature.

Additional Resources:

For further information in regard to water quality, please visit the below:

<https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>