Health & Safety Program

Lead in Water Management Plan

Mahtomedi School District - ISD 832 Revised 2018

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Lead in Water Management Plan

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1.0 Purpose

Mahtomedi Public Schools is committed to providing a safe working and learning environment for employees and students. This Management Plan for Lead-in-Water was developed to reduce the potential for exposure to lead in water and to comply with Minnesota Statute 121A.335, the Minnesota Department of Health (MDH) and the Minnesota Department of Education (MDE). This plan will also endeavor to comply with recommendations from the Environmental Protection Agency's (EPA's) 3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance (2006) and the Lead Contamination Control Act (LCCA) of 1988.

Minnesota Statute 121A.335 requires public school buildings serving kindergarten through grade 12 to test for lead in water in potable water sources (water for consumption) every 5 years. The MDH and MDE have published Reducing Lead in Drinking Water: A Technical Guidance and Model Plan for Minnesota's Public Schools, which presents a model plan that school districts can choose to adopt as part of the requirement of Minnesota Statute 121A.335. The EPA 3Ts was created by the EPA to identify and reduce lead in drinking water in schools. Lead is a metal that usually enters drinking water through the distribution system, including pipes, solders, faucets, and valves. Lead levels in water may increase when the water is allowed to sit undisturbed in the system. Exposure to lead is a significant health concern.

The EPA 3Ts has recommended that schools take remedial action to address lead-in-water exposure whenever lead levels exceed 20 parts per billion (ppb). The MDH and the MDE have jointly provided guidance that there is no safe level of lead and that districts should work to minimize the risk of lead. Mahtomedi Public Schools MDH and MDE recommended actions are described in section 4.0 of this plan.

The identified Program Manager and contact person for Mahtomedi Public Schools' Lead-in-Water Program is the Mahtomedi Public Schools Buildings and Grounds Supervisor, Julie Osterbauer, 651-407-2205, julie.osterbauer@ISD832.net.

2.0 Water Sampling Program Development

Identified potable water sources in district facilities, including sinks and drinking fountains in kitchens, staff lounges, classrooms, home economics classrooms, and hallways, will be sampled during the school year throughout the district at least once every five years.

Mahtomedi Public Schools last sampled all water sources in the 2016-2017 school year. The next five-year cycle will become due in the 2021-2022 school year. Nothing prevents the district from sampling water sources in some buildings before then. However, the next sampling cycle must then occur within five years of that sampling.

Prior to sampling, the following takes place:

- An inventory of potable water taps is taken
 - The district will benchmark from the inventory of water sources compiled during the 2016-2017 sampling and testing cycle
- All drinking fountains are checked to ensure the EPA has not identified them as having a lead lined tank under LCCA
 - To the best of our knowledge, the district has removed those water fountains from use

Potable water sources will be resampled at least once every five years, per MN Statute 121A.335, or when a fixture or water supply is repaired or replaced, or after construction activities that may impact the plumbing system. A testing schedule is included in Appendix A which has each school scheduled to complete testing every 5 years.

3.0 First Draw Tap Monitoring

Water sampling of the identified cold water taps is conducted as a "first draw" sample prior to usage on the day of sampling.

Taps included in the first draw sampling should not be used for 6-18 hours prior to sampling. If the district cannot ensure identified taps were used the day prior to sampling, flushing will occur according to EPA protocol (2-3 minutes, 8-18 hours

prior to sampling). Water samples of 250 milliliters (ml) are analyzed by an accredited testing laboratory, using EPA approved analytical methods and quality control procedures (i.e. such as the ICP/MS EPA Method 200.8).

4.0 Maintenance Procedures

When lead content exceeds 20 ppb, fixtures are taken out of service until the lead content can be reduced to 20 ppb or lower. A lead-in-water concentration of 20 ppb (maximum) or less is considered acceptable by the EPA. Potable water outlets found to have greater than this concentration will be replaced, removed or filtered.

In addition, the MDH and MDE model plan recommends routine maintenance take place to prevent and help reduce elevated lead levels in drinking water. This includes cleaning faucet aerators where lead-containing materials may accumulate on a quarterly basis and following manufacturer's recommendations for water softener settings to ensure an appropriate level of hardness.

Flushing:

The district will not engage in flushing water sources to lower lead levels. It will replace, remove, or filter those water sources.

Replace, Remove and Filter Options:

Recommendations of one of the following treatment options for fixtures with lead levels approaching or exceeding the EPA action level may be considered for implementation:

- Investigate to determine the source of the lead responsible for an elevated lead level
 - Collecting multiple samples in a row can assist in determining the location of the lead-containing component (e.g. fittings for cold water supply lines)
 - Samples should be collected upstream of the cold supply lines
 - Once the source is identified, remove, replace with lead-free component, and retest
- If sampling indicates that fixture is the source of the elevated lead level, replace fixture with a "lead-free" fixture certified to NSF/ANSI 372 or NSF/ANSI 61-G
 - The Reduction of Lead in Drinking Water Act redefines "lead-free" as "not more than a weighted average of 0.25% lead when used with respect to wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures"
 - Effective January 4, 2014, drinking water system components sold or installed must adhere to this new requirement
 - A list of EPA Lead Free Certification Marks can be found here: http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100GRDZ.txt
- Remove fixture from service by disconnecting it from the water supply
 - When possible remove the fixture from use in the building
- Install a National Sanitation Foundation (NSF) certified filter for lead reduction
 - The filter selected should work by size exclusion of lead particles as opposed to lead adsorption.
 - Filters should have tight pores (1-micron or less)
 - NSF lists many such filters on its website
 - Following replacement, retest the first-draw lead level after flushing the line 8-18 hours prior to testing to confirm that filter is successful in reducing lead levels
 - Note: Point-of-Use (POU) Treatment Device systems may be subject to Department of Labor and Industry (DLI) or local administrative authority plan review and approval prior to installation
 - Contact DLI at 651-284-5063 for more information

Mahtomedi Public Schools recommends taking the following actions at 20 ppb:

- Retest the sampled tap and attempt to more accurately determine the source of the lead
 - Consider monitoring the tap more frequently until the source of lead is found and removed
- Consider the feasibility of other steps to minimize lead exposure
 - Take into account other actions that the school may already have in place
- Make all test results and lead education materials accessible to community

Such as on a website, or annual report, and available upon request.

5.0 Communication of Results and Follow-up Actions

Per Minnesota Statute 121A.335, a school district that has tested its buildings for the presence of lead shall make the results of the testing available to the public for review and must notify parents of the availability of the information. It is recommended that a copy of the district's Lead-in-Drinking Water Testing reports be made available to staff and the public through the district's administrative offices and district website.

Notification is accomplished by publishing a statement in the district's annual notifications or a back to school publication that is available to staff, students, parents and the public. For example notifications, see the MDE and MDH Education and Communication Toolkit: Reducing Lead in Drinking Water, A Technical Guidance and Model Plan for Minnesota's Public Schools, located on the MDH website.

The Mahtomedi Public Schools notice will say"

Mahtomedi Public Schools is committed to providing a safe working and learning environment for employees and students. In accordance with Minnesota Statute 121A.335, the Minnesota Department of Health (MDH) and the Minnesota Department of Education (MDE), the Mahtomedi Public Schools has conducted, and continues to conduct, Lead in Drinking Water testing per the Minnesota Department of Health's "Reducing Lead in Drinking Water: A Technical Guidance for Minnesota's School and Child Care Facilities" recommendations.

Mahtomedi Public Schools last sampled all water sources in the 2016-2017 school year. The next five-year cycle will become due in the 2021-2022 school year. Anyone interested in discussing the district Lead in Drinking Water program or test results, please contact the Supervisor of Buildings and Grounds, Julie Osterbauer, at 651-407-2205 or julie.osterbauer@ISD832.net.

The MDE and MDH guidance document states in their Model Plan that School Management should:

- Assign a designated person to be the contact
 - The Supervisor of Buildings and Grounds, Julie Osterbauer, at 651-407-2205 or julie.osterbauer@ISD832.net
- Notify affected individuals about the availability of the testing results within a reasonable time
 - School employees, students and parents should be informed and involved in the communication process
 - Results of initial and any follow-up testing should be easily accessible along with documentation of lead hazard reduction options
 - Posting the information on a website is preferred, but the information should also be available to those without easily accessible internet access
 - Examples of other information venues are: meetings, open houses, and public notices; and
- Identify and share specific activities pursued to correct any lead problems
 - Local health officials can assist in understanding potential health risks, technical assistance and communication strategies

6.0 Recordkeeping

Lead-in-water testing reports are located and available for review in the Mahtomedi Public Schools office of the Supervisor of Buildings and Grounds and on the district website under About/Facilities/Routine sampling & testing documentation.

Mahtomedi Public Schools retains lead-in-water records for a minimum of five years.

Appendix A

Testing Schedule

	Last Tested	Next Tested
Mahtomedi High School	2016-2017 School Year	2021-2022 School Year
Mahtomedi Middle School	2016-2017 School Year	2021-2022 School Year
OHA Anderson ES	2016-2017 School Year	2021-2022 School Year
Wildwood ES	2016-2017 School Year	2021-2022 School Year
District Education Center	2016-2017 School Year	2021-2022 School Year
Passages Transition School	2017-2018 School Year	2021-2022 School Year

Appendix B

Lead-in-Water Testing Results and Locations

Lead in Water sampling and testing results for 2016-2017 and 2017-2018 school years and follow up work is posted on Mahtomedi Public Schools website. Please see the About/Facilities/Routine sampling & testing documentation of the Mahtomedi Public Schools website or contact the Supervisor of Buildings and Grounds, Julie Osterbauer, at 651-407-2205 or julie.osterbauer@ISD832.net