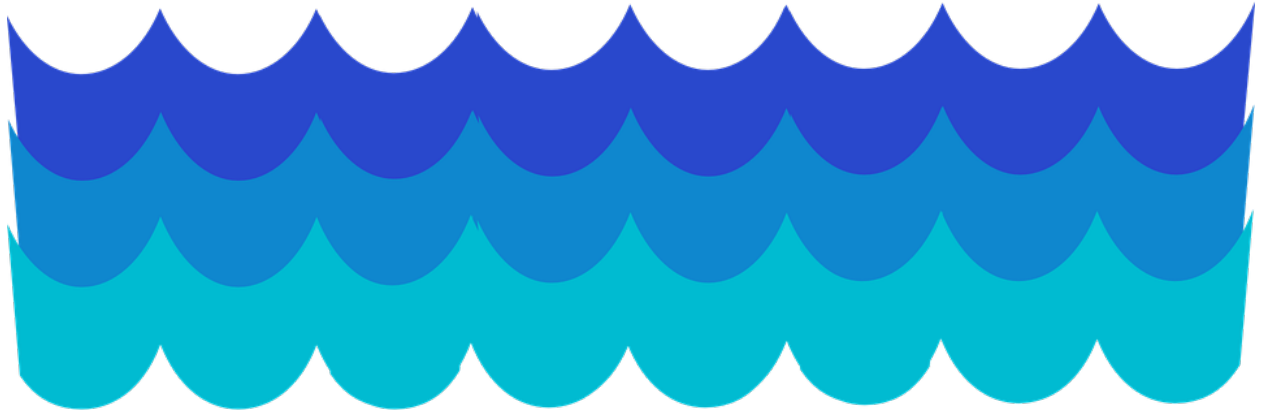


Detroit Lakes Public Schools

Management Plan for Lead-in-Water



Detroit Lakes Public Schools

May 18, 2018

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1.0 Purpose

Detroit Lakes 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. Detroit Lakes Public Schools, MDH and MDE recommended actions are described in section 4.0 of this plan.

The identified Program Manager and contact person for Detroit Lakes Public Schools' Lead-in-Water Program is the Detroit Lakes Public Schools Supervisor of Operations.

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.

Detroit Lakes Public Schools last sampled all water sources in Fiscal Year 2016. The next five-year cycle will become due in Fiscal Year 2021. 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 sampling and testing cycle

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- Because many students and staff carry their own drink containers, any water outlets in restrooms, custodial closets, science labs, art rooms, and other general-purpose workrooms from which a cup of water could be drawn and consumed will be included in the sampling inventory
- 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. Sampling begins at the taps closest to building entry point of water source to prevent accidental flushing of other sample locations in the building. Normal usage of the building should occur the day before sampling. Sampling should not take place on Mondays or after non-school days.

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. While fixtures can still be used for drinking and cooking, MDH and MDE recommend actions be taken to determine the source of lead and reduce lead levels in fixtures when sampling reveals lead content between 2 and 20 ppb. A lead-in-water concentration of or less than 20 ppb (maximum) 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.

In addition, it is recommended to flush potable water outlets following any two-week vacancy or prior to the beginning of school in the fall, regardless of the lead levels found in the most recent sampling. As long as the fixtures are used regularly, lead levels should remain acceptable. The fixtures should be flushed when the building has been at low occupancy, for example, following school breaks.

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

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- 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

Detroit Lakes Public Schools recommends taking the following actions at 2 ppb to 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 Detroit Lakes Public Schools notice will say:

Detroit Lakes 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 Detroit Lakes 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.

Detroit Lakes Public Schools last sampled all water sources in Fiscal Year 2016. The next five-year cycle will become due in Fiscal Year 2021. Anyone interested in discussing the district Lead in Drinking Water program or test results, please contact the Supervisor of Operations.

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 Operations
- 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 Detroit Lakes Public Schools Buildings and Grounds office and on the district website. See Appendix B for the most recent sampling locations and results.

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

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Appendix A

Testing Schedule

	Last Tested	Next Tested
Detroit Lakes High School	Fiscal Year 2016	Fiscal Year 2021
Middle School	Fiscal Year 2016	Fiscal Year 2021
Rossman Elementary	Fiscal Year 2016	Fiscal Year 2021
Roosevelt Elementary	Fiscal Year 2016	Fiscal Year 2021
Mstate ALC	Fiscal Year 2016	Fiscal Year 2021
Lincoln Education Center	Fiscal Year 2018	Fiscal Year 2023

Appendix B

Lead-in-Water Testing Results and Locations

Lead in Water sampling and testing results for fiscal year 2016 and follow up work will be posted to the Detroit Lakes Public Schools website not later than July 1, 2018. Please see the Detroit Lakes Public Schools website or contact the Supervisor of Operations at 218-847-9271.