



Lead In Water Safety Program

March 2013

**District Facilities Department
Environmental Services Group**

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Environmental Services Group

Applies to: ALL
 FP ESG NAC SEM
 FM Other

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026

Rev.
02

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Title: Program Name

Type: Procedure SOP Contract Form
 Specification Design Accounting Planning
 Program Other

Department Owner:
Environmental Services Group

REV	DESCRIPTION OF CHANGE	DOC APPRV.	EFF. DATE
1.0	Written Program	TIS	4/26/2016
2.0	Review	CDN	3/31/2016
3.0	Review	MCS	5/29/2018

DISTRICT PROGRAM FOR DEVELOPMENT AND IMPLIMENTATION OF PROCESSES TO BE USED IN SAINT PAUL PUBLIC SCHOOLS OPERATIONS

PURPOSE

Lead in Water

Saint Paul Public Schools (SPPS) is committed to providing a safe and healthful learning and work environment for all students and staff. We recognize the importance of protecting our students and staff from potential lead exposure and will accomplish this via the following model plan. The following Lead in Water Standard of Operation is provided as a guide to assist employers and employees of Saint Paul Public Schools in complying with Minnesota Statute 121A.335, and the Minnesota Department of Health (MDH) and the Minnesota Department of Education requirement for lead in drinking water for public schools, as well as to provide other helpful information.

Minnesota Statute 121A.335 requires public school buildings serving kindergarten through grade 12 to test for lead in water in potable water sources (consumable water) 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 is available for schools to adopt. Saint Paul Public Schools has used this to develop the following Lead in Water Safety Standard of Operation.

The District Environmental Services Group (ESG) will review the standard annually for particular requirements, which are applicable to the District and adjust this program accordingly.

The standard of operation is designed to be specific to the needs of users of Saint Paul Public Schools.

The standard of operation is intended to comply with the State of Minnesota's requirements.

If there are conflicts or discrepancies between this standard of operation and the State of Minnesota's requirements, the State of Minnesota shall take precedence.

OBJECTIVE

The objective of the Saint Paul School District Lead in Water Standard of Operation is to provide lead-safe drinking water sources throughout all of its facilities. Minnesota Statute 121A.335 requires lead concentration to be under 20 ppb in any tap that could be used as a drinking water source in a public school. Environmental Services Group (ESG) will maintain a copy of this program. A copy can be obtained from ESG.

ASSIGNMENT OF RESPONSIBILITY

Management

Environmental Services Group (ESG)

- ESG is responsible for identifying potable water sources in all schools.
- ESG is responsible for accurately sampling and testing all schools.
- ESG is responsible for retesting any source that tests at or above 20 ppb with a flush sample.
- ESG is responsible for immediately remediating any drinking water source that tests above 20 ppb after a flush sample.
- ESG is responsible for sending 10% of each schools samples to an independent certified lab for further QA/QC.
- ESG is responsible for maintaining sampling results.

PROCEDURES

This program is modeled after the Minnesota Department of Health's "Reducing Lead in Drinking Water: A Technical Guidance and Model Plan for Minnesota's Public Schools". The program identifies drinking water sources, provides testing for these sources for lead and outlines follow-up procedures for fixtures testing high in lead content. Saint Paul Public Schools will retest lead in water in each school at minimum every 5 years.

Drinking Water Sources

SPPS recognizes that any fixture that can be used for consumption must be tested for lead in water. These fixtures include:

- Drinking fountains;
- Sinks in classrooms (exception science lab rooms in junior and senior highs);
- All kitchen area sources;
- All nurse/heath area sources;
- Water dispensers (not bottled);
- Restroom sinks;
- Office sinks; and
- Boiler Room sinks and first draws.

Only cold water taps will be tested. Additional sources may be added if they are identified as sources of consumption by facility occupants.

Testing Methodology

Saint Paul Public Schools has outlined a testing protocol as follows:

1. Sample collection is performed on Sundays to obtain a “worst case” sample of the drinking water a person may consume from a fixture. The day before sampling, normal usage of the sampling tap should occur. Taps must sit stagnant for a minimum of six hours but not more than 18 hours before testing;
2. The water is the “first draw” of water from a fixture; “first draw” means that the samples are collected before the fixture is used or flushed for the day. “First draw” represents a worst case scenario;
3. The sample collection size is 250 ml;
4. The samples are analyzed on site using USEPA approved ANDalyze Fluorimeter;
5. The instrument is calibrated at each site for accurate readings;
6. After each analysis, all components used during the analysis including cuvette, sensor housing, sample tube, sample bottles and syringes will be discarded to avoid cross contamination
7. Test results should be at or below 20 parts per billion (ppb); If the results are at or above 20ppb a flush sample is then taken;
8. Flush sample – flush the water for exactly 15 sec before collecting the sample from the sample source. Collect a sample of 250 mL. The flush sample will be tested using the ANDalyze Fluorometer. A flush sample will be taken only once and not repeated even if the flush sample results are higher than 20ppb.
9. 10% of samples tested are sent to an independent certified lab for additional QA/QC to verify results collected by the district.
10. Do not flush the toilets or turn on the faucets for drinking water or washing hands until all samples are collected and tested.
11. All samples collected from BUNN machines will be allowed to cool to room temperature and then tested using the ANDalyze Fluorimeter
12. Samples are not kept for record after they have been tested.
13. All drinking water sources shall be sampled, at minimum, every five years.

High Test Results and Remediation

Flushing:

Flushing is a best management practice used to eliminate lead in water by controlling the amount of time water is allowed to be unused. The longer water is stagnant in a system, the greater the likelihood lead in water levels will increase. The flushing procedure works by removing water that has been in the system overnight prior to consumption.

Fixtures testing above 20 ppb shall have a follow-up “flush” sample collected and tested using the ANDalyze Fluorimeter. A flush test means that the fixture is run for 15 seconds before a new sample is collected in a new 250 mL container. If the **flush** sample

analysis is **below** 20 ppb, the district mandates the tap be flushed for 15 seconds before being used for consumption. Signs reading:

PLEASE FLUSH
FOR 15 SECONDS
BEFORE CONSUMPTION

Shall be placed near affected sinks and the Head Engineers shall be notified.

Removal:

Fixtures **failing** the flush test, meaning their results still read at or above 20 ppb after running the fixture for 15 seconds, shall be turned off until replacement of the fixture is provided.

Sample Labeling

Each sample shall be labeled with the following:

- Name of School
- Date of sampling
- Room Number
- Sink Number*

*For rooms that contain more than one sink, sinks shall be sampled in a clockwise order with the first sink being that closest to the left of the door.

Communication of Results

SPPS maintains current lead in water testing information for each school on the SPPS Facilities webpage: <https://www.spps.org/Page/3483>.

This web page provides the most current lead in water laboratory report for each school. In addition, school principals will be notified of lead in water results for their respective school after the conclusion of all testing in that school. A copy of SPPS Lead in Water Safety Program is also provided on the website.

RECORDKEEPING REQUIREMENTS

Management

Records of testing results will be maintained by ESG and can be accessed upon request. Test results will be posted on Saint Paul Public Schools/Facilities website.

Contact Information

Any questions, concerns, comments, or other information regarding the District Lead in Water SOP can be directed to:

- ❖ The Environmental Services Group
- ❖ Phone: 651.744.1800
- ❖ Web Site: http://facilities.spps.org/health_safety
- ❖ Email: ESG@spps.org

RESOURCES & APPENDIX

Reducing Lead in Drinking Water:

- ✓ Reducing Lead in Drinking Water: A Technical Guidance and Model Plan for Minnesota's Public Schools. Minnesota Department of Health. Minnesota Department of Education. April 2018.

MDH Drinking Water in Schools for Educators and School Professionals:

- ✓ Minnesota Department of Health Drinking Water in Schools for Educators and School Professionals. Minnesota Department of Health. Accessed May 29, 2018. <http://www.health.state.mn.us/divs/eh/water/schools/>.

MDH Education and Communication Toolkit: Reducing Lead in Drinking Water

- ✓ Minnesota Department of Health Education and Communication Toolkit: Reducing Lead in Drinking Water. Minnesota Department of Health. Minnesota Department of Education. Accessed May 29, 2018. <http://www.health.state.mn.us/divs/eh/water/schools/toolkit.pdf>.

EPA 3Ts for Reducing Lead in Drinking Water in Schools

- ✓ 3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance. Environmental Protection Agency. October 2006. Accessed May 29, 2018. https://www.epa.gov/sites/production/files/2015-09/documents/toolkit_leadschools_guide_3ts_leadschools.pdf.