

Water Testing Procedures

For

Community Unit School District 95

Lake Zurich, IL 60047

Purpose

District 95, in order to ensure we are providing safe drinking water for all building occupants, tests for lead and copper levels in potable water throughout the District. . According to the Environmental Protection Agency (EPA), actionable levels of lead in the water are above 15 parts per billion (ppb) for Public Water Systems (PWS) and 20 ppb for water outlets (drinking fountains, faucets, ice makers, etc.) and 1300 parts per billion for copper within an occupied building. District 95 has adopted the more stringent level of 15 ppb for lead as a guide for when corrective measures should be taken.

District 95 intends to systematically monitor drinking fountains, faucets in areas where food is prepared and ice makers. The district will also test faucets used by Athletic Trainers to fill water containers for Athletics and faucets in each nurse's office. The District may test other water outlets as deemed necessary.

If tests reveal an actionable level of lead or copper at a water outlet, the district will take steps to correct the situation. Test results will be communicated with Building Indoor Air Quality Committees and will be posted on District 95's website on the Facilities Department page.

Procedures

- A. The following initial testing guidelines will be followed:
 1. Each building will be surveyed identifying the location of each water outlet to be sampled and assign a distinct location code for each test site, designating whether the water outlet is a drinking fountain, faucet or ice maker.
 2. If a faucet is being tested, samples shall be taken from the cold water service side of the faucet.
 3. Initial samples shall be taken in the morning as the "first draw of the day". Morning, first draw water most often contains the highest concentration of lead as it has sat in the pipes overnight. Water outlets to be tested need to have the water sitting in the pipes for not less than 6 – 8 hours but not longer than 18 hours. As a result, water samples should not be taken on Monday mornings or after holidays or following other student non-attendance days.
 4. A 250 ml. sample shall be taken from each water outlet. Testing receptacles shall be provided by the testing laboratory. On paperwork supplied by the testing facility, the following will be recorded:
 - a. Identification code/Location of the outlet;
 - b. Date the sample was taken;
 - c. Time the sample was taken;
 - d. Classification of water type, typically DW for Drinking Water.

5. Samples will only be taken by a state licensed Lead Inspector and Risk Assessor.
6. Water samples will be submitted to a state approved testing facility for analysis. District 95 uses McHenry Analytical Water Laboratory, Inc. (IL State ID #100279) of McHenry, IL.
7. Results are typically received within 5 – 10 business days after they have been submitted to the lab for testing.
8. Sampling results shall be reviewed by District 95 staff. If there are any locations found to be above the actionable level, appropriate steps will be taken as described later in this document.
9. All sampling results will be posted to District 95's website at www.lz95.org under Departments, on the Facilities Department page.

- B. If initial test results reveal actionable levels, the water outlet will be retested and taken out of service. If subsequent test results are below actionable levels, no further action will be taken and the water will be restored:

As in the initial sample, water taken from the outlet that was above the actionable level needs to be the "first draw of the day", where water has sat in the outlet for 6 – 8 hours but not more than 18 hours. Therefore follow-up samples should not be taken on a Monday morning, after holidays or other student non-attendance days.

1. Run the water outlet for 30 seconds.
2. Water samples shall be submitted for analysis to McHenry Analytical Water Laboratory, Inc.
3. If the results are below the actionable level of 15 ppb for lead, water service can be restored and the water outlet flushed.

- C. One or more steps shall be taken if secondary test results are above the action level of 15 ppb for a particular outlet:

1. Replace the outlet. Drinking fountains should be replaced with new, lead reducing, filtered drinking fountains. Faucets shall be replaced with new "lead free" faucets.
 - a. Prior to use, test samples of the outlet shall be taken again following the steps laid out in the previous section. Water shall not be turned back on until test results have come back showing lead and copper levels below the actionable level of 15 ppb for lead and 1300 ppb for copper .
 - b. c. For faucets, a Point of Use (POU) device can be used. These are cartridge filters that can be installed on the faucet where the aerator is typically found.

- D. All drinking fountains, faucets used in food preparation areas and ice makers shall be flushed at the start of each school year.

1.

Frequency of Testing

District 95 will test the identified water outlets once per year to coincide with winter Indoor Air Quality testing. Results of all sampling shall be posted to the District website at www.lz95.org under Departments, under the Facilities page.

Number of Samples by Building

The Environmental Protection Agency has established guidelines for how many samples - based upon the occupancy of the facility - should be taken for testing outlets in schools that are on their own water supply, meaning that they have a well. For more information, see the EPA's 'A Quick Reference Guide for Schools and Child Care Facilities that are Regulated Under the Safe Drinking Water Act'.

Often times, the number of samples the district takes is greater than what is recommended. In order to sample all areas of concern (please see the list of testing sites by school) the guidelines established are a minimum sampling count for each building. District 95's focus is all drinking fountains, ice machines, faucets where food is prepared, faucets used by athletic trainers to fill water containers for athletics, faucets in the nurses' offices and if necessary, faucets in classrooms in order to reach the required number of samples. The identification code in the list of sampling sites by school will be followed.

<u>Occupancy</u>	<u>Number of Samples</u>	<u>Schools</u>
<100	5	None
101 – 500	10	SP, SA
501 – 3,300	20	MW, IF, SL, MSS, MSN, LZHS
3,301 – 10,000	40	None
10,001 – 50,000	60	None

Testing Code by Outlet by School

To create a unique code for each water outlet the district will use the following matrix:

School - Type of Water Outlet - Location - Identifier

As an example, code SL DF Off H is **S**pencer **L**oomis **D**rinking **F**ountain near the **O**ffice and is the **H**igh unit. Codes used are:

Schools

HS High School

IF Isaac Fox
MW May Whitney
MSN Middle School North
MSS Middle School South
SA Sarah Adams
SL Spencer Loomis
SP Seth Paine

Water Outlet

DF Drinking Fountain
F Faucet
IM Ice Maker
St Steamer

Location

101 Room Number
B Boy's
Dr Door
GAL Girl's Athletic Locker room
G Girl's
Gy Gymnasium
K Kitchen
Main Main Gym
Nu Nurse
Staff Staff Lounge
Ton Tonelli gym
Wr Weight room

Misc

E East
H High
Le Left
Lo Low
M Middle
N North
P Preparation
R Right
Si Sink
So South
W West