American Water Works Association
Illinois Section

Sampling Protocol for Drinking Water in Schools

A Guidance Document for Drinking Water Testing

- Schools must use an Illinois Environmental Protection Agency (IEPA) accredited laboratory for the testing.
- Schools must provide the Illinois Department of Public Health (IDPH) with sample results within 7 days of receipt. Results should be emailed to DPH.LeadH2O@illinois.gov.

SB 0550 was signed by Governor Bruce Rauner on January 16, 2017. It requires all schools (Pre-K through 5th grade) to test for lead in water used for drinking and cooking. Schools built after January 1, 2000 are not required to test at this time.

Sampling must be completed by:

- December 31, 2017 — Schools constructed prior to January 1, 1987
- December 31, 2018 — Schools constructed between January 2, 1987 and January 1, 2000

Action Steps Prior to Sampling

1. Your local water supply can be a great resource. Contact them to request assistance in establishing your sampling plan.

2. Obtain a general floor plan for each school building. Floor plans are available in the schools' asbestos management plan.

3. Identify all fixtures to be sampled on the general floor plan. All plumbing fixtures that are used for cooking or drinking must be sampled. Bathroom and utility sinks do not need to be sampled.

4. Assign a unique alphanumeric identifier to each fixture.

5. Label fixture identifiers on the floor plan. Make sure all samples are labeled with the corresponding alphanumeric identifier for each fixture.

6. Determine which IEPA accredited laboratory you will utilize for the analysis. A list can be found at **http://www.epa.illinois.gov/citizens/citizens-information/in-your-home/resources-on-lead/index.**

7. Contact the laboratory to obtain enough 250 mL sample bottles and Chain of Custody forms to allow you to collect 2 samples from each fixture. The laboratory will also provide sample shipping instructions.

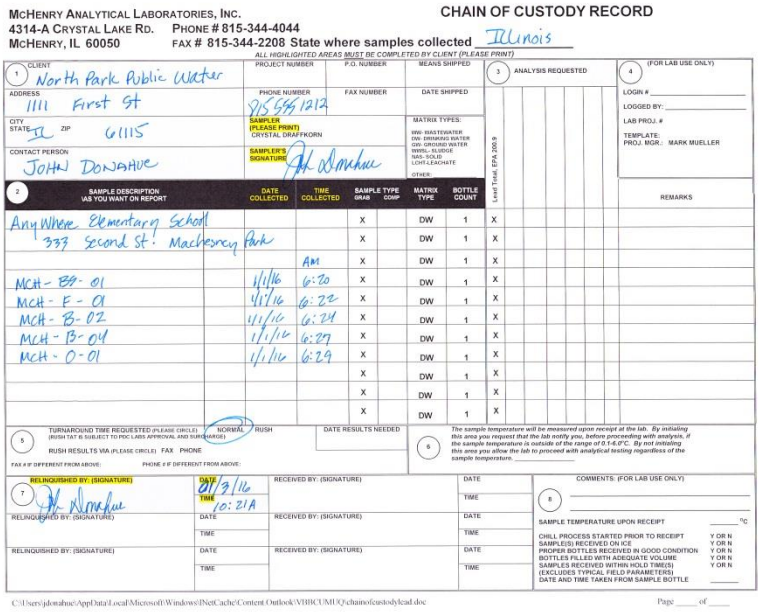
Sample Collection Procedure

- ❖ Do NOT collect samples on Mondays or after extended holiday/break periods.
- ❖ Schools should develop a program to routinely flush plumbing fixtures after extended school closings.
- ❖ Do NOT flush plumbing fixtures in advance of sampling.

<u>WARNING!</u> Use caution when collecting samples. Some sample containers may contain a nitric acid preservative that can cause skin irritation.

PROCEDURE

1. Each fixture must be sampled twice:
   a. First draw sample
   b. Second draw sample after 30 seconds
2. Ensure water has been idle and unused in pipes and fixtures for at least eight hours, but not more than 18 hours.
3. Prior to sampling, label the sample bottles with the alphanumeric identifier. Do not open the sample bottles until you are ready to collect each sample.
4. Position the first sample bottle beneath the fixture and turn the water on. Do not allow any water to spill.
5. Fill the bottle to the shoulder or the line marked 250 mL and turn the water off. Cap the bottle tightly.
6. Turn the water back on and allow the water to run for 30 seconds before filling the second sample bottle. Cap the bottle tightly.
7. Make sure both bottles are labeled with the date and time, alphanumeric identifier, and sample description (first or second draw).
8. Fill out Chain of Custody for each sample.
9. Continue sampling all fixtures until all samples are collected. Prepare the samples for shipping per laboratory instructions.



McHENRY ANALYTICAL LABORATORIES, INC.
4314-A CRYSTAL LAKE RD. PHONE # 815-344-4044
McHENRY, IL 60050 FAX # 815-344-2208 State where samples collected Illinois

CHAIN OF CUSTODY RECORD

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

CLIENT	PROJECT NUMBER	P.O. NUMBER	MEANS SHIPPED
North Park Public Water			

ADDRESS	PHONE NUMBER	FAX NUMBER	DATE SHIPPED
1111 First St	815 568 1212		

CITY STATE ZIP	SAMPLER (PLEASE PRINT)	MATRIX TYPES
IL 61115	CRYSTAL DRAFFKORN	

CONTACT PERSON	SAMPLER'S SIGNATURE	OTHER:
JOHN DONAHUE		

SAMPLE DESCRIPTION (AS YOU WANT ON REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	Lead Total, EPA 200.9
Anywhere Elementary School			X		DW	1	X
333 Second St. Machesney Park			X		DW	1	X
		AM	X		DW	1	X
MCH - B9 - 01	1/1/16	6:20	X		DW	1	X
MCH - E - 01	1/1/16	6:22	X		DW	1	X
MCH - B - 02	1/1/16	6:24	X		DW	1	X
MCH - B - 04	1/1/16	6:27	X		DW	1	X
MCH - O - 01	1/1/16	6:29	X		DW	1	X
			X		DW	1	X
			X		DW	1	X
			X		DW	1	X

LOGIN #
LOGGED BY:
LAB PROJ. #
TEMPLATE:
PROJ. MGR.: MARK MUELLER
REMARKS

TURNAROUND TIME REQUESTED (PLEASE CIRCLE) (RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE) NORMAL RUSH DATE RESULTS NEEDED
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
	1/3/16	10:21A			
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT _____ °C

CHILL PROCESS STARTED PRIOR TO RECEIPT	Y OR N
SAMPLE(S) RECEIVED ON ICE	Y OR N
PROPER BOTTLES RECEIVED IN GOOD CONDITION	Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME	Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) (EXCLUDES TYPICAL FIELD PARAMETERS)	Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE	

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Test Results

How to interpret your test results

1. Test results will be reported in either parts per billion (ppb) or micrograms per liter (ug/l). Both units of measure are appropriate.
2. If any sample exceeds 5 ppb of lead, the notification requirements are triggered.

Reporting and Notification Requirements

- Within 7 business days of receipt of test results, schools must email all results to IDPH at DPH.LeadH2O@illinois.gov.
- If all sample results are less than 5 ppb, schools may use their website (at minimum) to notify parents of the results.
- If any of the sample results exceed 5 ppb, schools must notify parents in writing or electronically, and include :
  - The location and source exceeding 5 ppb, and
  - The USEPA website for information about lead in drinking water: https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

Parents should be advised to contact their health care provider with any concerns about their child's health, including blood tests for lead exposure.

Next Steps

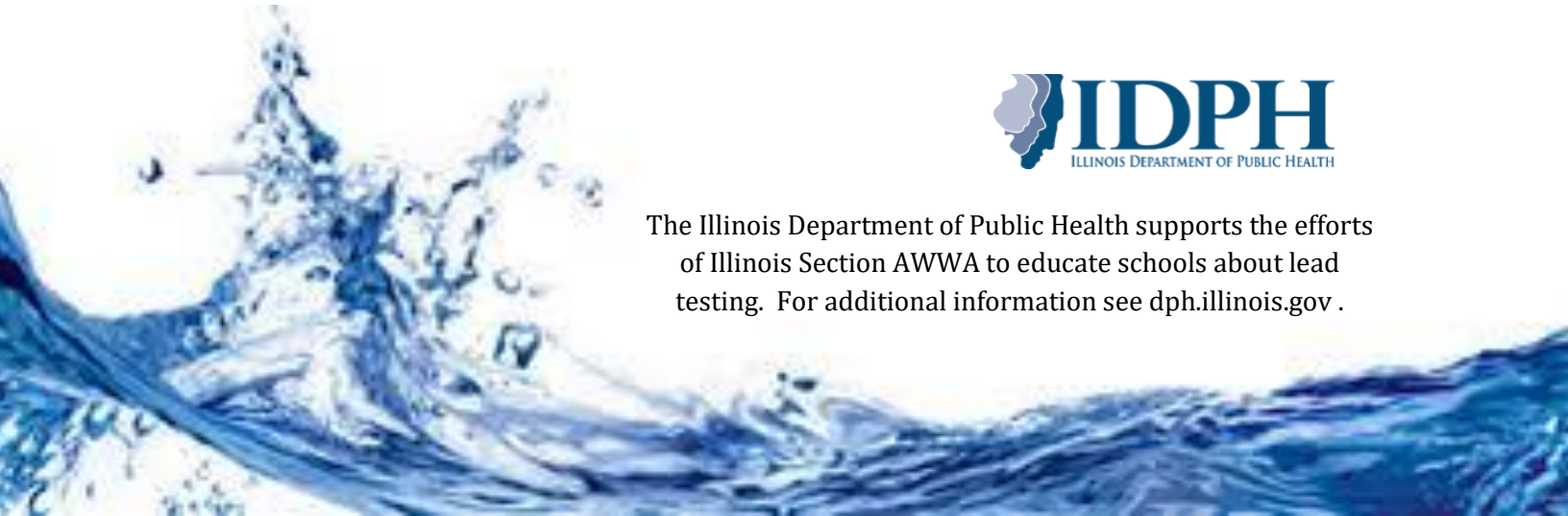
Test results will likely generate questions from parents, guardians, and the public about steps the school is taking to address lead in water.

Removing fixtures from use may not be an immediate option. Establishment of a water management plan, including identification of lead-containing plumbing, scheduled flushing, fixture replacement, and monitoring is the best course of action for schools addressing positive lead test results.

Additional guidance for interim (short-term) and permanent lead control measures is provided in the USEPA 3Ts for Reducing Lead in Drinking Water in Schools. This document can be found at:

www.epa.gov/sites/production/files/201509/documents/toolkit_leadschools_guide_3ts_leadschools.pdf

American Water Works Association
Illinois Section

IDPH
Illinois Department of Public Health

The Illinois Department of Public Health supports the efforts of Illinois Section AWWA to educate schools about lead testing. For additional information see dph.illinois.gov .