

February 11, 2020

Mr. David Blackburn
Financial Manager
Dixon Public School District 170
1335 Franklin Grove Road
Dixon, IL 61021

email: dblackburn@dps170.org

**RE: Lead Water Re-Sampling
Madison Elementary School
618 Division Street
Dixon, IL 61021
GBTS Proposal No. 19-18499**

Dear Mr. Blackburn:

Dixon Public School District 170 implemented a proactive program of water testing at Madison Elementary School. Water re-sampling on November 7, 2019 by Dan Petras of Gallagher Bassett Technical Services (GBTS). The re-sampling was conducted at the locations where lead content exceeded the EPA action level during initial monitoring. Water sampling was originally conducted on December 2, 2017.

All sampling methodology followed protocol required by The Lead in Drinking Water Testing Bill (LDWTB) and guidelines published by the Illinois Department of Public Health (IDPH). Detailed background information on testing requirements, methodology and lead health effects are included in the initial report to the District that summarizes results and offers recommendations. The lab report is provided in Attachment 1.

Results in parts per billion (ppb) are as follows:

Sample ID 11/19	Location	November 2019		December 2017	
		First Draw in ppb	Flush Draw in ppb	First Draw in ppb	Flush Draw in ppb
MS-5	Nurse's Office Sink	3.85	< 1.00	411	ND
MCS-23	Room 9 Sink 1	18.8	1.90	44.4	5.60
MCS-28	Room 6 Sink 1	5.50	3.49	111	5.08
MCS-11	Room 12 Sink 1	17.4	3.05	49.9	6.42
MS-22	Sensory Room Sink 1	96.0	21.0	162	8.55

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All first draw results were less than initial findings. Results remained above the EPA action limit of 15 ppb on the first draw for the sinks in Rooms 9 and 12. In the Sensory Room, both the first draw and flush sample results were above the action limit. These sinks should remain out of service and labeled to avoid using as a drinking or cooking source.

Results should be emailed to the IDPH at DPH.LeadH2O@illinois.gov.

Several results exceeded the Illinois Lead in Drinking Water Testing Bill notification level of 5 ppb. Parents must be notified in writing or electronically of the location/source and provided the US EPA website link for information regarding lead in drinking water.

<https://www.epa.gov/ground-water-and-drinking-water/basicinformation-about-lead-drinking-water>

Attachment 2 contains a summary of the IDPH recommendations for a Water Quality Management Plan.

PROFESSIONAL CERTIFICATION

Gallagher Bassett Technical Services conducted this study in the interest of Dixon Public School District 170 to assist in meeting environmental obligations and regulations. In this respect, we hope the results of this study are useful. *This study was not intended to include every environmental exposure that may be present at the facility; only those items specifically addressed in the report were evaluated.* If you have any questions concerning this study please let us know.

Should you have any questions, please do not hesitate to contact us.

Respectfully submitted,

Gallagher Bassett Technical Services

Prepared by:



Esteban Peña
Manager of Remediation Services

Reviewed by:



Cynthia Darling MS, CIH, CSP
Senior Consultant

EP/CD:rm
Enclosure



TECHNICAL SERVICES

**ATTACHMENT 1
LAB REPORT**

ISBE ID	Building ID	Building Description	Sample Date	Sample Time (12 HR Clock)	Collected By
47-052-1700-22-2003	0001	Main Building	11/07/2019	06:19 AM	D. Petras
47-052-1700-22-2003	0001	Main Building	11/07/2019	06:20 AM	D. Petras
47-052-1700-22-2003	0001	Main Building	11/07/2019	06:22 AM	D. Petras
47-052-1700-22-2003	0001	Main Building	11/07/2019	06:23 AM	D. Petras
47-052-1700-22-2003	0001	Main Building	11/07/2019	06:25 AM	D. Petras
47-052-1700-22-2003	0001	Main Building	11/07/2019	06:26 AM	D. Petras
47-052-1700-22-2003	0001	Main Building	11/07/2019	06:30 AM	D. Petras
47-052-1700-22-2003	0001	Main Building	11/07/2019	06:31 AM	D. Petras
47-052-1700-22-2003	0001	Main Building	11/07/2019	06:34 AM	D. Petras
47-052-1700-22-2003	0001	Main Building	11/07/2019	06:35 AM	D. Petras

Sample ID Number	Sample Location Description	Fixture Type	Date of Last Use	Time of Last Use (12 HR Clock)	Sample Type
MS-5A	Nurse's Office	S - Sink	11/6/2019	9:00 PM	First Draw
MS-5B	Nurse's Office	S - Sink	11/6/2019	9:00 PM	Flush
MCS-23A	Room 9	S - Sink	11/6/2019	9:00 PM	First Draw
MCS-23B	Room 9	S - Sink	11/6/2019	9:00 PM	Flush
MCS-28A	Room 6	S - Sink	11/6/2019	9:00 PM	First Draw
MCS-28B	Room 6	S - Sink	11/6/2019	9:00 PM	Flush
MCS-11A	Room 12	S - Sink	11/6/2019	9:00 PM	First Draw
MCS-11B	Room 12	S - Sink	11/6/2019	9:00 PM	Flush
MS-22A	Sensory Room	S - Sink	11/6/2019	9:00 PM	First Draw
MS-22B	Sensory Room	S - Sink	11/6/2019	9:00 PM	Flush

Sample Volume (mL)	Laboratory Name	Analytical Method	Concentration (ug/L)	Reporting Limit (ug/L)
250	PDC Laboratories	EPA 200.8	3.85 ppb	1.00 ppb
250	PDC Laboratories	EPA 200.8	ND	1.00 ppb
250	PDC Laboratories	EPA 200.8	18.8 ppb	1.00 ppb
250	PDC Laboratories	EPA 200.8	1.90 ppb	1.00 ppb
250	PDC Laboratories	EPA 200.8	5.50 ppb	1.00 ppb
250	PDC Laboratories	EPA 200.8	3.49 ppb	1.00 ppb
250	PDC Laboratories	EPA 200.8	17.4 ppb	1.00 ppb
250	PDC Laboratories	EPA 200.8	3.05 ppb	1.00 ppb
250	PDC Laboratories	EPA 200.8	96.0 ppb	1.00 ppb
250	PDC Laboratories	EPA 200.8	21.0 ppb	1.00 ppb

Notes

Column Title
ISBE ID
Building ID
Building Description
Sample Date
Sample Time (12 HR Clock)
Collected By
Sample ID Number
Sample Location Description
Fixture Type
Date of Last Use
Time of Last Use (12 HR Clock)
Sample Type
Sample Volume (mL)
Laboratory Name
Analytical Method
Concentration (ug/L)
Reporting Limit (ug/L)
Notes
Resources

Description

References the Region County District Type Schools (RCDS) number provided by schools on the Chain of
A 4-digit numeric code established by the schools to designate the building being sampled. If only one building is present on-campus then it should be designated 0001. A second building, such as an athletic center, would be
A brief description of the building sampled. For example, concession stand.
The sample date should match the Chain of Custody and should follow month/day/year (MM/DD/YYYY).
The sample time should match the Chain of Custody.
The name or initials of the person who conducted the sampling.
This number is established by the person conducting the testing and should match the Sample Number on the
This description is established by the person conducting the testing and should match Chain of Custody.
The fixture type should be limited to the drop down menu. If "Other" is selected, a description of the fixture type
The date should follow month/day/year format (MM/DD/YYYY).
The time is used to verify that sampling comported with the mandated stagnation period of 8 to 18 hours.
The sample type should be limited to the drop down menu.
First draw and flush samples should be collected in a sterile 250 milliliter (mL) container designated for the
Testing should be conducted only at Illinois EPA-accredited laboratories.
The analytical method should be limited to the drop down menu.
Results are to be reported with three significant digits and units of ppb or microgram per liter ($\mu\text{g/L}$). For
A minimum reporting limit of 2.00 ppb must be used.
Any additional relevant information.
<ul style="list-style-type: none">• Public Act 99-0922: http://www.ilga.gov/legislation/publicacts/99/PDF/099-0922.pdf• US EPA testing methods: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P100PHGZ.txt• IEPA Certified Labs: http://www.epa.illinois.gov/citizens/citizens-information/in-your-home/resources-on-lead/index• Sampling Guidance: http://dph.illinois.gov/sites/default/files/publications/sampling-drinking-water-guidance-

ATTACHMENT 2
ILLINOIS DEPARTMENT OF PUBLIC HEALTH SUGGESTIONS FOR A WATER QUALITY
MANAGEMENT PLAN

The Illinois Department of Public Health offers some suggestions for a Water Quality Management Plan (WQMP) with the intention of ensuring safe, potable drinking water. The water in an internal plumbing system, if left unused for extended periods of time (even as short as 2 to 3 days), can become stagnant and develop water quality issues such as elevated lead concentrations and potentially harmful bacterial growth. An effective WQMP can help mitigate the potential for these negative issues.

The principal goal of a WQMP is to flush an adequate amount of water through the plumbing system in order to maintain fresh (safe) drinking water at all times, in all areas of the school. The recommended steps include:

1. Define a team
 - Chose individuals to implement the program
2. Understand the School Layout
 - Familiarize the team with the layout of the plumbing system
 - Identify locations of drinking fountains and food service water fixtures
 - Identify fixtures that are used infrequently
3. Understand the School Schedule
 - Identify times when the school is closed for more than one day including weekends, holidays and breaks.
 - Identify areas of the school that are used infrequently
4. Develop a Plan
 - At minimum, the plan should include
 - Flush fixtures farthest from the entry point of water service to the building for 10 minutes each morning.
 - Open fixtures used for cooking and drinking and run until the water temperature gets colder.
 - Flushing can be done mechanically (installation of valves, etc. to flush automatically) or manually.
5. Implement the Plan
 - Remove problem fixtures (testing positive for lead) from service until remedied and retested.
 - Address persistent problem fixtures
 - Source investigation by sequential sampling
 - Source investigation by plumbing survey
 - Removal/replacement of fixtures (seek advice of licensed plumber or engineer)
 - Installation of automatic flushing equipment

More information is provided by the IDPH in their publication Mitigation Strategies for Lead found in School Drinking Water at <http://www.dph.illinois.gov/sites/default/files/publications/school-lead-mitigation-strategies-050917.pdf>.

