

November 14, 2023

Jonathan Spitzer
District Facilities Manager
Fridley Public Schools
6000 West Moore Lake Drive
Fridley, MN 55432



**RE: Fridley Public Schools
Lead-in-Water First Draw – Initial Testing
IEA Project #202310772**

Dear Mr. Spitzer:

At the request of Fridley Public Schools, IEA collected 292 water samples from identified potable water sources on October 24, 2023, for lead analyses from the following buildings:

- Fridley High School (63 samples)
- R.L. Stevenson Elementary School (72 samples)
- Alternative Learning Center (4 samples)
- Fridley Middle School (46 samples)
- Hayes Elementary School (72 samples)
- Fridley Community Center (35 samples)

The purpose of the sampling is to document lead content in the sampled locations.

INTRODUCTION

Minnesota Statute 121A.335 requires public school buildings serving pre-kindergarten through grade 12 to test for lead in potable water fixtures every five years. The *3Ts for Reducing Lead in Drinking Water Toolkit (2018)* and the Lead Contamination Control Act (LCCA) of 1988 were created by the Environmental Protection Agency (EPA) to identify and reduce lead in drinking water. Lead is a metal that usually enters drinking water through the distribution system, including pipes, solder, faucets, and valves. Lead content in water may increase when the water is allowed to sit undisturbed in the system. Exposure to lead is a health concern.

The EPA recommends taking action when elevated lead levels are noted in water fixtures. At the time of testing, MDH and MDE recommend taking a fixture out of service if levels are 20 parts per billion (ppb) or higher. Legislation taking effect July 1, 2024 requires removing a fixture from service and taking action for levels 5 parts per billion (ppb) or higher. The MDH and MDE also recommend taking action according to their guidelines for fixtures with levels of 2 parts per billion (ppb) or higher.

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Mankato, MN 56001
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ROCHESTER
210 Woodlake Drive SE
Rochester, MN 55904
507-281-6664 / FAX 507-281-6695
800-233-9513

BRAINERD
601 NW 5th Street, Ste. #4
Brainerd, MN 56401
218-454-0703 / FAX 218-454-0703
800-233-9513

MARSHALL
1420 East College Drive
Marshall, MN 56258
507-476-3599 / FAX 507-537-6985
800-233-9513

VIRGINIA
5525 Emerald Avenue
Mountain Iron, MN 55768
218-410-9521
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METHODOLOGY

IEA collected 292 first draw (unless otherwise noted) samples of approximately 250 milliliters (ml) of water. “First draw” means the samples are collected before the fixture is used or flushed during the day. The first-draw sample results reflect a worst-case scenario, i.e., the highest lead level that would be consumed by building occupants. MDH recommends fixtures not be used 6 to 18 hours prior to sampling fixtures.

Water samples were analyzed by Minnesota Valley Testing Laboratories (MVTL) in New Ulm, Minnesota, which uses EPA-approved analytical methods and quality control/assurance procedures. Samples were analyzed using the MVTL Method: ICP/MS EPA Method 200.8.

RESULTS & DISCUSSION

The table below shows the lead level result ranges in each building in Fridley Public Schools. See *Table 1: Lead-in-Water Ranges in Schools*. Lead levels ranged from below the level of detection (<0.5 ppb) to 560 ppb.

Table 1: Lead-in-Water Ranges in Schools

Building	Lowest (ppb)	Highest (ppb)
Fridley High School	<0.5	560
Fridley Middle School	<0.5	27.0
R.L. Stevenson Elementary School	<0.5	10.1
Hayes Elementary School	<0.5	211
Alternative Learning Center	<0.5	2.43
Fridley Community Center	<0.5	40.5

ppb – parts per billion

There are 6 sample results greater than 20 ppb as referenced in the following *Table 2: Lead-in-Water Testing Results Exceeding 20 ppb*. The laboratory reports are provided in Appendix A. Laboratory results are reported in micrograms per liter (µg/L) which is equivalent to ppb. Maps are located in Appendix B.

Table 2: Lead-in-Water Testing Results Exceeding 20 ppb – October 24, 2023

Building	Sample Number	Sampling Location	Fixture Type	Lead Test Results (ppb)
Fridley High School	10242023FHS-52	Office (across room 113)	Sink	25.0
Fridley High School	10242023FHS-26	West Hallway (outside room 139) - South	Drinking Fountain	560
Fridley Middle School	10242023FMS-43	Room 171	Sink	27.0
Hayes Elementary School	10242023HES-72	Kitchen	Steam Kettle Sprayer	33.2
Hayes Elementary School	10242023HES-70	Kitchen - West	Sink	211
Fridley Community Center	10242023FCC-18	Room 109	Sink	40.5

ppb – parts per billion

There are 24 sample results between 5 ppb and 20 ppb. Currently, MDH recommends reducing the lead content in school drinking water below 5 ppb. After July 1, 2024 MDH will require reducing the lead content in school drinking water below 5 ppb. See *Table 3: Water Testing Results Ranging from 5 ppb to 20 ppb*. The laboratory reports are provided in Appendix A. Laboratory results are reported in micrograms per liter (µg/L) which is equivalent to ppb. Maps are located in Appendix B.

Table 3: Lead-in-Water Testing Results Ranging from 5 ppb to 20 ppb – October 24, 2023

Building	Sample Number	Sampling Location	Fixture Type	Lead Test Results (ppb)
Fridley High School	10242023FHS-51	Room 113 - East	Sink	5.43
Fridley High School	10242023FHS-22	Kitchen - South	Sink	5.75
Fridley High School	10242023FHS-17	Media Center Copy Room	Sink	6.75
Fridley High School	10242023FHS-58	Kitchen - West	Handwashing Sink	8.01
Fridley High School	10242023FHS-45	Room 116	Sink	8.43
Fridley High School	10242023FHS-61	Kitchen - East	Steam Kettle	13.6
Fridley High School	10242023FHS-15	Room 143	Sink	17.5
Fridley High School	10242023FHS-27	West Hallway (outside room 139) - North	Drinking Fountain	19.5
Fridley Middle School	10242023FMS-38	Media Center Room 195A	Sink	9.20
Fridley Middle School	10242023FMS-30	Room 121	Sink	10.0
Fridley Middle School	10242023FMS-13	Room 160E	Sink	10.6
Fridley Middle School	10242023FMS-6	Pool	Drinking Fountain	11.0
Fridley Middle School	10242023FMS-12	Room 186	Sink	11.1
Fridley Middle School	10242023FMS-2	Room 178	Sink	11.8
Hayes Elementary School	10242023HES-6	Room 103	Sink	5.36
Hayes Elementary School	10242023HES-2	Front Office West Side Room	Sink	7.39
Hayes Elementary School	10242023HES-79	Room 135	Sink	7.80
Hayes Elementary School	10242023HES-86	Kitchen	Sink Sprayer	9.33
Hayes Elementary School	10242023HES-69	Kitchen - East	Sink	10.7
RL Stevenson Elementary School	10242023SES-53	Room 119	Sink	5.12
RL Stevenson Elementary School	10242023SES-80	Room 137	Sink	6.45
RL Stevenson Elementary School	10242023SES-70	Kitchen	Steam Kettle Sprayer	7.69
RL Stevenson Elementary School	10242023SES-67	Kitchen	Sink	10.1
Fridley Community Center	10242023FCC-14	Room 124	Sink	8.56

ppb – parts per billion

There are 262 sample results between 0.5 ppb and 5 ppb. See *Table 4: Water Testing Results Ranging from 0.5ppb to 5ppb*. The laboratory reports are provided in Appendix A. Laboratory results are reported in micrograms per liter (µg/L) which is equivalent to ppb. Maps are located in Appendix B.

Table 4: Lead-in-Water Testing Results Ranging from <0.5 ppb to 5 ppb – October 24, 2023

Building	Sample Number	Sampling Location	Fixture Type	Lead Results (ppb)
Fridley High School	10242023FHS-1	Main Office	Water Cooler	<0.5
Fridley High School	10242023FHS-2	Main Office	Sink	<0.5
Fridley High School	10242023FHS-5	Room 169	Water Cooler	<0.5
Fridley High School	10242023FHS-8	South Hallway (across room 159)- East	Water Cooler	<0.5
Fridley High School	10242023FHS-9	South Hallway (across room 159)	Water Bottle Filler	<0.5
Fridley High School	10242023FHS-13	South Hallway (across Room 154) - East	Water Cooler	<0.5
Fridley High School	10242023FHS-14	South Hallway (across Room 154) - West	Water Cooler	<0.5
Fridley High School	10242023FHS-18	Cafeteria - East	Drinking Fountain	<0.5
Fridley High School	10242023FHS-19	Cafeteria - West	Drinking Fountain	<0.5
Fridley High School	10242023FHS-24	Kitchen - West	Steam Kettle	<0.5
Fridley High School	10242023FHS-25	Dock	Refrigerated Water Dispenser	<0.5
Fridley High School	10242023FHS-31	Auditorium Hallway- Northeast	Drinking Fountain	<0.5
Fridley High School	10242023FHS-34	Band Hallway (across 123 Band)	Drinking Fountain	<0.5
Fridley High School	10242023FHS-35	North Hallway (outside Bathroom) - West	Water Cooler	<0.5
Fridley High School	10242023FHS-36	North Hallway (outside Bathroom) - West	Water Bottle Filler	<0.5
Fridley High School	10242023FHS-37	North Hallway (outside Bathroom) - East	Water Cooler	<0.5
Fridley High School	10242023FHS-38	North Hallway (outside Bathroom) - East	Water Bottle Filler	<0.5
Fridley High School	10242023FHS-40	Women's Locker Room - North	Water Cooler	<0.5
Fridley High School	10242023FHS-41	Women's Locker Room - South	Water Cooler	<0.5
Fridley High School	10242023FHS-42	Hallway (between basketball courts)	Sink	<0.5
Fridley High School	10242023FHS-44	Men's Locker Room - South	Water Cooler	<0.5
Fridley High School	10242023FHS-47	Room 113 - West	Sink	<0.5
Fridley High School	10242023FHS-53	Cafeteria - East	Water Bottle Filler	<0.5
Fridley High School	10242023FHS-54	Cafeteria - West	Water Bottle Filler	<0.5
Fridley High School	10242023FHS-64	Cafeteria - North	Water Bottle Filler	<0.5
Fridley High School	10242023FHS-65	Cafeteria - North	Water Cooler	<0.5
Fridley High School	10242023FHS-66	South Hallway (across room 154) - East	Water Bottle Filler	<0.5
Fridley High School	10242023FHS-67	South Hallway (across room 154) - West	Water Bottle Filler	<0.5
Fridley High School	10242023FHS-68	Band Hallway (across 123 Band)	Water Bottle Filler	<0.5
Fridley High School	10242023FHS-69	Auditorium - Northeast	Water Bottle Filler	<0.5

Building	Sample Number	Sampling Location	Fixture Type	Lead Results (ppb)
Fridley High School	10242023FHS-55	Kitchen - Center East	Sink	0.55
Fridley High School	10242023FHS-56	Kitchen - Southeast	Handwashing Sink	0.67
Fridley High School	10242023FHS-63	Kitchen - West (by oven)	Sink	0.67
Fridley High School	10242023FHS-7	Room 169	Hot Water Dispenser	0.69
Fridley High School	10242023FHS-59	Kitchen - Center West	Sink	0.73
Fridley High School	10242023FHS-57	Kitchen - East	Handwashing Sink	0.79
Fridley High School	10242023FHS-62	Kitchen - East (by door)	Sink	0.92
Fridley High School	10242023FHS-49	Room 113 - South	Sink	1.33
Fridley High School	10242023FHS-60	Kitchen - North	Steam Kettle	1.38
Fridley High School	10242023FHS-6	Room 169	Sink	1.58
Fridley High School	10242023FHS-29	Room 136	Sink	1.73
Fridley High School	10242023FHS-21	Kitchen - West	Sink	2.01
Fridley High School	10242023FHS-48	Room 113 - Southwest	Sink	2.25
Fridley High School	10242023FHS-3	Eastern most Office	Sink	2.29
Fridley High School	10242023FHS-20	Kitchen - East	Sink	2.34
Fridley High School	10242023FHS-46	Room 113 - Northwest	Sink	2.65
Fridley High School	10242023FHS-11	South Storage	Sink	2.67
Fridley High School	10242023FHS-30	Auditorium Hallway- South	Drinking Fountain	3.43
Fridley High School	10242023FHS-50	Room 113 - Southeast	Sink	3.49
Fridley High School	10242023FHS-32	Auditorium Hallway - North	Drinking Fountain	3.66
Fridley High School	10242023FHS-10	South Hallway (across room 159) - West	Water Cooler	3.69
Fridley High School	10242023FHS-23	Kitchen	Sprayer	4.40
Fridley High School	10242023FHS-39	Room by Door 15	Sink	4.73
Fridley Middle School	10242023FMS-5	Women's Locker Room 180C - South	Water Cooler	<0.5
Fridley Middle School	10242023FMS-7	Gymnasium 184 - East	Water Cooler	<0.5
Fridley Middle School	10242023FMS-8	Gymnasium 184	Water Bottle Filler	<0.5
Fridley Middle School	10242023FMS-9	Gymnasium 184 - West	Water Cooler	<0.5
Fridley Middle School	10242023FMS-18	Hallway outside Northwest Bathrooms - East	Water Cooler	<0.5
Fridley Middle School	10242023FMS-19	Hallway outside Northwest Bathrooms	Water Bottle Filler	<0.5
Fridley Middle School	10242023FMS-24	Hallway (adjacent to Room 127)	Water Cooler	<0.5
Fridley Middle School	10242023FMS-25	Hallway (adjacent to Room 127)	Water Bottle Filler	<0.5
Fridley Middle School	10242023FMS-34	Hallway outside Northeast Bathrooms - East	Water Cooler	<0.5
Fridley Middle School	10242023FMS-35	Hallway outside Northeast Bathrooms	Water Bottle Filler	<0.5
Fridley Middle School	10242023FMS-36	Hallway outside Northeast Bathrooms - West	Water Cooler	<0.5
Fridley Middle School	10242023FMS-47	Hallway outside Gymnasium 180 - East	Water Cooler	<0.5

Building	Sample Number	Sampling Location	Fixture Type	Lead Results (ppb)
Fridley Middle School	10242023FMS-48	Hallway outside Gymnasium 180	Water Bottle Filler	<0.5
Fridley Middle School	10242023FMS-49	Hallway outside Room 100D	Water Cooler	<0.5
Fridley Middle School	10242023FMS-56	Cafeteria - East	Water Cooler	<0.5
Fridley Middle School	10242023FMS-57	Cafeteria	Water Bottle Filler	<0.5
Fridley Middle School	10242023FMS-58	Cafeteria - West	Water Cooler	<0.5
Fridley Middle School	10242023FMS-3	Room 179	Sink	0.54
Fridley Middle School	10242023FMS-23	Room 130	Sink	0.69
Fridley Middle School	10242023FMS-1	Room 173A	Sink	0.70
Fridley Middle School	10242023FMS-45	Room 167 - South	Sink	0.75
Fridley Middle School	10242023FMS-26	Room 128	Sink	0.88
Fridley Middle School	10242023FMS-52	Kitchen	Sprayer	1.01
Fridley Middle School	10242023FMS-55	Kitchen	Steam Kettle	1.10
Fridley Middle School	10242023FMS-44	Room 167 - North	Sink	1.13
Fridley Middle School	10242023FMS-32	Room 118	Sink	1.15
Fridley Middle School	10242023FMS-33	Room 112	Sink	1.15
Fridley Middle School	10242023FMS-20	Room 136	Sink	1.18
Fridley Middle School	10242023FMS-22	Room 132	Sink	1.20
Fridley Middle School	10242023FMS-27	Room 125A	Sink	1.21
Fridley Middle School	10242023FMS-31	Room 122	Sink	1.24
Fridley Middle School	10242023FMS-29	Room 124	Sink	1.36
Fridley Middle School	10242023FMS-28	Room 126	Sink	1.38
Fridley Middle School	10242023FMS-21	Room 134	Sink	1.63
Fridley Middle School	10242023FMS-50	Room 100D	Sink	1.70
Fridley Middle School	10242023FMS-51	Room 106	Sink	2.03
Fridley Middle School	10242023FMS-37	Room 115A	Sink	2.17
Fridley Middle School	10242023FMS-42	Room 165 - South	Sink	3.35
Fridley Middle School	10242023FMS-53	Kitchen - North	Sink	4.84
Hayes Elementary School	10242023HES-14	Hallway Outside West Bathrooms - South Side E	Water Cooler	<0.5
Hayes Elementary School	10242023HES-15	Hallway Outside West Bathrooms - North Side W	Water Cooler	<0.5
Hayes Elementary School	10242023HES-16	Hallway Outside Gym - South	Water Cooler	<0.5
Hayes Elementary School	10242023HES-17	Hallway Outside Gym - North	Water Cooler	<0.5
Hayes Elementary School	10242023HES-34	Hallway Outside Northwest Bathrooms - East	Water Cooler	<0.5
Hayes Elementary School	10242023HES-35	Hallway Outside Northwest Bathrooms - East	Water Bottle Filler	<0.5
Hayes Elementary School	10242023HES-36	Hallway Outside Northwest Bathrooms - West	Water cooler	<0.5
Hayes Elementary School	10242023HES-37	Room 145	Sink	<0.5
Hayes Elementary School	10242023HES-38	Room 146	Sink	<0.5
Hayes Elementary School	10242023HES-39	Room 147	Sink	<0.5

Building	Sample Number	Sampling Location	Fixture Type	Lead Results (ppb)
Hayes Elementary School	10242023HES-40	Room 148	Sink	<0.5
Hayes Elementary School	10242023HES-41	Room 149	Sink	<0.5
Hayes Elementary School	10242023HES-42	Room 140	Sink	<0.5
Hayes Elementary School	10242023HES-43	Room 141	Sink	<0.5
Hayes Elementary School	10242023HES-44	Room 142	Sink	<0.5
Hayes Elementary School	10242023HES-45	Room 143	Sink	<0.5
Hayes Elementary School	10242023HES-47	Hallway Outside Northeast Bathrooms - East	Water Cooler	<0.5
Hayes Elementary School	10242023HES-48	Hallway Outside Northeast Bathrooms	Water Bottle Filler	<0.5
Hayes Elementary School	10242023HES-49	Hallway Outside Northeast Bathrooms - West	Water Cooler	<0.5
Hayes Elementary School	10242023HES-66	Hallway Outside East Bathrooms - South	Water Bottle Filler	<0.5
Hayes Elementary School	10242023HES-67	Hallway Outside East Bathrooms - South	Water Cooler	<0.5
Hayes Elementary School	10242023HES-68	Cafeteria - West	Water Cooler	<0.5
Hayes Elementary School	10242023HES-87	Hallway Outside Northeast Bathrooms - West	Water Bottle Filler	<0.5
Hayes Elementary School	10242023HES-88	Hallway Outside Northwest Bathrooms - West	Water Bottle Filler	<0.5
Hayes Elementary School	10242023HES-89	Hallway Outside East Bathrooms - Center North	Water Cooler	<0.5
Hayes Elementary School	10242023HES-90	Hallway Outside East Bathrooms - Center South	Water Cooler	<0.5
Hayes Elementary School	10242023HES-91	Hallway Outside East Bathrooms - North	Water Cooler	<0.5
Hayes Elementary School	10242023HES-92	Hallway Outside East Bathrooms - North	Water Bottle Filler	<0.5
Hayes Elementary School	10242023HES-93	Cafeteria - East	Water Cooler	<0.5
Hayes Elementary School	10242023HES-94	Cafeteria	Water Bottle Filler	<0.5
Hayes Elementary School	10242023HES-95	Hallway Outside Gym	Water Bottle Filler	<0.5
Hayes Elementary School	10242023HES-96	Hallway Outside West Bathrooms - South Side West	Water Cooler	<0.5
Hayes Elementary School	10242023HES-97	Hallway Outside West Bathrooms - South	Water Bottle Filler	<0.5
Hayes Elementary School	10242023HES-98	Hallway Outside West Bathrooms - North	Water Bottle Filler	<0.5
Hayes Elementary School	10242023HES-99	Hallway Outside West Bathrooms - North Side East	Water Cooler	<0.5
Hayes Elementary School	10242023HES-10	Room 105	Sink	0.51
Hayes Elementary School	10242023HES-12	Room 107	Sink	1.03
Hayes Elementary School	10242023HES-24	Room 113	Sink	1.25
Hayes Elementary School	10242023HES-20	Room 106	Sink	1.38
Hayes Elementary School	10242023HES-32	Room 117	Sink	1.38
Hayes Elementary School	10242023HES-46	Room 144	Sink	1.48
Hayes Elementary School	10242023HES-3	Health Office	Sink	1.50

Building	Sample Number	Sampling Location	Fixture Type	Lead Results (ppb)
Hayes Elementary School	10242023HES-75	Room 129	Sink	1.51
Hayes Elementary School	10242023HES-58	Room 123	Sink	1.55
Hayes Elementary School	10242023HES-84	Room 139	Sink	1.61
Hayes Elementary School	10242023HES-71	Kitchen	Steam Kettle	1.72
Hayes Elementary School	10242023HES-8	Room 102	Sink	1.79
Hayes Elementary School	10242023HES-22	Room 111	Sink	1.90
Hayes Elementary School	10242023HES-4	Room 101	Sink	1.94
Hayes Elementary School	10242023HES-18	Room 109	Sink	1.97
Hayes Elementary School	10242023HES-26	Room 108	Sink	1.99
Hayes Elementary School	10242023HES-73	Custodial Office	Sink	2.05
Hayes Elementary School	10242023HES-62	Room 125	Sink	2.21
Hayes Elementary School	10242023HES-56	Room 121	Sink	2.24
Hayes Elementary School	10242023HES-77	Room 133	Sink	2.28
Hayes Elementary School	10242023HES-81	Multipurpose Room 126	Sink	2.31
Hayes Elementary School	10242023HES-82	Room 137	Sink	2.36
Hayes Elementary School	10242023HES-28	Room 115	Sink	2.43
Hayes Elementary School	10242023HES-1	Front Office East Side Room	Sink	2.50
Hayes Elementary School	10242023HES-54	Room 114	Sink	2.54
Hayes Elementary School	10242023HES-52	Room 112	Sink	2.66
Hayes Elementary School	10242023HES-74	Medial Center Office	Sink	2.66
Hayes Elementary School	10242023HES-30	Room 110	Sink	3.26
Hayes Elementary School	10242023HES-64	Room 127	Sink	3.59
Hayes Elementary School	10242023HES-50	Room 119	Sink	4.98
RL Stevenson Elementary School	10242023SES-10	Room 107	Hot Water Dispenser	<0.5
RL Stevenson Elementary School	10242023SES-16	Hallway Outside West Staff Bathrooms - East	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-17	Hallway Outside West Staff Bathrooms - West	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-35	Hallway Outside Northwest Bathrooms - East	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-36	Hallway Outside Northwest Bathrooms - East	Water Bottle Filler	<0.5
RL Stevenson Elementary School	10242023SES-37	Hallway Outside Northwest Bathrooms - West	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-39	Room 146	Sink	<0.5
RL Stevenson Elementary School	10242023SES-40	Room 147	Sink	<0.5
RL Stevenson Elementary School	10242023SES-41	Room 148	Sink	<0.5
RL Stevenson Elementary School	10242023SES-42	Room 149	Sink	<0.5
RL Stevenson Elementary School	10242023SES-43	Room 140	Sink	<0.5

Building	Sample Number	Sampling Location	Fixture Type	Lead Results (ppb)
RL Stevenson Elementary School	10242023SES-44	Room 141	Sink	<0.5
RL Stevenson Elementary School	10242023SES-45	Room 142	Sink	<0.5
RL Stevenson Elementary School	10242023SES-46	Room 143	Sink	<0.5
RL Stevenson Elementary School	10242023SES-47	Room 144	Sink	<0.5
RL Stevenson Elementary School	10242023SES-48	Hallway Outside Northeast Bathrooms - East WC	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-49	Hallway Outside Northeast Bathrooms - East WBF	Water Bottle Filler	<0.5
RL Stevenson Elementary School	10242023SES-50	Hallway Outside Northeast Bathrooms - West WC	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-63	Hallway Outside East Student Bathrooms - North	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-64	Hallway Outside East Student Bathrooms - South	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-65	Cafeteria	Water Bottle Filler	<0.5
RL Stevenson Elementary School	10242023SES-82	Cafeteria - West	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-83	Cafeteria - East	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-84	Hallway Outside E BR - Center	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-85	Hallway Outside E BR - North	Water Bottle Filler	<0.5
RL Stevenson Elementary School	10242023SES-86	Hallway Outside E BR - Center	Water Bottle Filler	<0.5
RL Stevenson Elementary School	10242023SES-87	Hallway Outside NE Bathroom - West	Water Bottle Filler	<0.5
RL Stevenson Elementary School	10242023SES-88	Hallway Outside NW Bathroom - West	Water Bottle Filler	<0.5
RL Stevenson Elementary School	10242023SES-89	Hallway Outside West Student Bathroom - Northwest	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-90	Hallway Outside West Student Bathroom - Northeast	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-91	Hallway Outside West Student Bathroom - Northeast	Water Bottle Filler	<0.5
RL Stevenson Elementary School	10242023SES-92	Hallway Outside West Student Bathroom - Southwest	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-93	Hallway Outside West Student Bathroom - Southwest	Water Bottle Filler	<0.5
RL Stevenson Elementary School	10242023SES-94	Hallway Outside West Student Bathroom - Southeast	Water Cooler	<0.5
RL Stevenson Elementary School	10242023SES-95	Hallway Outside West Staff Bathroom	Water Bottle Filler	<0.5
RL Stevenson Elementary School	10242023SES-13	Room 106 - North	Sink	0.53
RL Stevenson Elementary School	10242023SES-38	Room 145	Sink	0.62
RL Stevenson Elementary School	10242023SES-4	Room 101	Sink	0.75

Building	Sample Number	Sampling Location	Fixture Type	Lead Results (ppb)
RL Stevenson Elementary School	10242023SES-3	Health Office	Sink	0.87
RL Stevenson Elementary School	10242023SES-62	Room 122	Sink	0.93
RL Stevenson Elementary School	10242023SES-77	Room 126	Sink	0.96
RL Stevenson Elementary School	10242023SES-8	Room 105	Sink	1.20
RL Stevenson Elementary School	10242023SES-12	Room 106 - South	Sink	1.24
RL Stevenson Elementary School	10242023SES-71	Room 129	Sink	1.47
RL Stevenson Elementary School	10242023SES-25	Room 110	Sink	1.48
RL Stevenson Elementary School	10242023SES-21	Room 108	Sink	1.61
RL Stevenson Elementary School	10242023SES-69	Kitchen	Steam Kettle	1.78
RL Stevenson Elementary School	10242023SES-54	Room 116	Sink	1.85
RL Stevenson Elementary School	10242023SES-66	Kitchen	Sink	1.98
RL Stevenson Elementary School	10242023SES-11	Room 107	Sink	2.00
RL Stevenson Elementary School	10242023SES-33	Room 117	Sink	2.02
RL Stevenson Elementary School	10242023SES-18	Media Center Storage	Sink	2.06
RL Stevenson Elementary School	10242023SES-58	Room 118	Sink	2.22
RL Stevenson Elementary School	10242023SES-19	Room 109	Sink	2.36
RL Stevenson Elementary School	10242023SES-5	Room 103	Sink	2.47
RL Stevenson Elementary School	10242023SES-75	Room 133	Sink	2.51
RL Stevenson Elementary School	10242023SES-31	Room 112	Sink	2.56
RL Stevenson Elementary School	10242023SES-27	Room 113	Sink	2.58
RL Stevenson Elementary School	10242023SES-60	Room 125	Sink	2.63
RL Stevenson Elementary School	10242023SES-1	Main Office Conference Room	Sink	2.92
RL Stevenson Elementary School	10242023SES-68	Kitchen	Sprayer	3.23
RL Stevenson Elementary School	10242023SES-73	Room 131	Sink	3.25
RL Stevenson Elementary School	10242023SES-29	Room 115	Sink	3.27
RL Stevenson Elementary School	10242023SES-56	Room 121	Sink	3.49
RL Stevenson Elementary School	10242023SES-23	Room 111	Sink	3.70

Building	Sample Number	Sampling Location	Fixture Type	Lead Results (ppb)
RL Stevenson Elementary School	10242023SES-51	Room 114	Sink	3.76
RL Stevenson Elementary School	10242023SES-78	Room 135	Sink	3.99
RL Stevenson Elementary School	10242023SES-7	Room 104	Sink	4.17
Fridley Community Center	10242023FCC-15	Copy Room	Sink	<0.5
Fridley Community Center	10242023FCC-21	Hallway North of Health Office - West	Water Cooler	<0.5
Fridley Community Center	10242023FCC-22	Hallway North of Health Office	Water Bottle Filler	<0.5
Fridley Community Center	10242023FCC-23	Hallway North of Health Office - East	Water cooler	<0.5
Fridley Community Center	10242023FCC-27	Hallway North of Gym/Cafe - West	Water Cooler	<0.5
Fridley Community Center	10242023FCC-28	Hallway North of Gym/Cafe	Water Bottle Filler	<0.5
Fridley Community Center	10242023FCC-29	Hallway North of Gym/Cafe - East	Water Cooler	<0.5
Fridley Community Center	10242023FCC-34	Rec Center	Water Cooler	<0.5
Fridley Community Center	10242023FCC-20	Health Office	Sink	0.64
Fridley Community Center	10242023FCC-30	Gym/Cafe	Water Cooler	0.67
Fridley Community Center	10242023FCC-26	Room 114	Hot Water Dispenser	0.69
Fridley Community Center	10242023FCC-3	Room 125	Sink	0.81
Fridley Community Center	10242023FCC-1	Hallway North of Room 123	Water Cooler	0.87
Fridley Community Center	10242023FCC-33	Rec Center	Sink	0.88
Fridley Community Center	10242023FCC-16	Room 108	Sink	1.14
Fridley Community Center	10242023FCC-5	Room 129	Sink	1.23
Fridley Community Center	10242023FCC-6	Room 131	Sink	1.27
Fridley Community Center	10242023FCC-8	Room 136	Sink	1.29
Fridley Community Center	10242023FCC-10	Room 132	Sink	1.34
Fridley Community Center	10242023FCC-12	Room 128	Sink	1.35
Fridley Community Center	10242023FCC-7	Room 135	Sink	1.42
Fridley Community Center	10242023FCC-19	Office	Sink	1.59
Fridley Community Center	10242023FCC-11	Room 130	Sink	1.62
Fridley Community Center	10242023FCC-25	Room 114	Sink	1.63
Fridley Community Center	10242023FCC-31	Room 122	Sink	2.04
Fridley Community Center	10242023FCC-24	Room 112	Sink	2.24
Fridley Community Center	10242023FCC-2	Room 123	Sink	2.40
Fridley Community Center	10242023FCC-35	Room 111	Sink	2.60
Fridley Community Center	10242023FCC-32	Kitchen 121	Sink	2.68
Fridley Community Center	10242023FCC-17	Room 110	Sink	3.06
Fridley Community Center	10242023FCC-13	Room 126A	Sink	3.25
Fridley Community Center	10242023FCC-4	Room 127	Sink	3.88
Fridley Community Center	10242023FCC-9	Room 134	Sink	4.85

Building	Sample Number	Sampling Location	Fixture Type	Lead Results (ppb)
Alternative Learning Center	10242023ALC-5	Hallway - West	Water Bottle Filler	<0.5
Alternative Learning Center	10242023ALC-1	Main Reception	Sink	0.54
Alternative Learning Center	10242023ALC-4	Hallway - West	Water Cooler	0.54
Alternative Learning Center	10242023ALC-2	Classroom	Sink	2.43

ppb – parts per billion

RECOMMENDATIONS

IEA recommends implementing one of the following treatment options for fixtures with elevated lead content. Fixtures should be retested after remediation to verify lead content reduction.

- The fixture should be removed from service by disconnecting it from the water supply and/or posting signs that the water is not potable and notify staff accordingly.
- Bottled water should be provided to occupants which meets FDA and state standards. A written statement from the bottled water distributor guaranteeing the standards are met should be filed with the district.
- Lead pipes on the property and district portion of the service line should be replaced.
- The plumbing system should be reconfigured to redirect the water to bypass any known sources of lead contamination.
- The fixture should be replaced 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 drinking water treatment unit certified to NSF/ANSI 53 or NSF/ANSI 42 for lead reduction should be installed.
- Flush testing should be conducted in accordance with MDH, MDE, and EPA guidelines to determine if flushing will reduce lead content. If results indicate that flushing will reduce lead to acceptable levels:
 - A flushing program should be implemented which includes documentation of daily flushing and periodic program review.
 - It should be noted that elevated levels can return quickly following flushing depending upon the age and condition of the plumbing. The plumbing components should be replaced to ensure any repair or replacement is done using only "lead-free" solder can address high lead levels.
 - Existing wires in the building that could be grounded to lead piping should be checked, since the electrical current produced may accelerate the corrosion of the pipes. The wires could also be checked to find an alternative grounding system.

In addition, the MDH recommends labeling any water fixtures not included in the sampling program, including bathroom taps, hose bibbs, laboratory faucets/sinks, or custodial closet sinks.

If the school receives its water from a Community Public Water Supply, such as a municipal water supply, MDH encourages the school to work with them to assess the source contribution of lead coming into the school.

It is recommended that a copy of the district's Lead in Water Testing Report be made available to staff and the public through the district's administrative offices. Per Minnesota Statutes, section 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.

GENERAL CONDITIONS

The analysis and opinions expressed in this report are based upon data obtained from Fridley Public Schools at the indicated locations. This report does not reflect variations in conditions that may occur across the site, property, or facility. Actual conditions may vary and may not become evident without further assessment.

The report is prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted environmental, health and safety practices. Other than as provided in the preceding sentence and in our Proposal #11379 dated June 8, 2023, regarding lead-in-water sampling at Fridley Public Schools, including the General Conditions attached thereto, no warranties are extended or made.

Please contact IEA if you would like assistance with any of the above recommendations or have questions regarding this report.

Sincerely,

IEA, Inc.

Reviewed by:



Aly Rockwell
EH&S Project Manager



Mary Ferrian, CSP
EHS Division Manager

AR/wb 111423

Enc.

Appendix A

Laboratory Testing Report

Appendix B

Maps