



March 13, 2017

Forest Hills School District
Bob VanderWoude
7550 Forest Road
Cincinnati, OH 45244

**Ayer
Elementary
School**

Dear Mr. VanderWoude:

Thank you for taking the responsibility seriously to protect the health of the children by voluntarily testing the water in your school for lead!

Attached please find the results of the lead analyses performed for Ayer Elementary School by the Greater Cincinnati Water Works (GCWW). The following comments speak to the process, samples analyzed and additional steps needed to help ensure the safety of all the students within the school.

School Sampling Process and Results

GCWW and Forest Hills School District (FHSD) staff worked together to finalize a sampling plan for the school. The *USEPA 3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance Document (3Ts Guidelines)* is the process and guidelines used for assisting schools with testing for lead.

In January, eighty-seven (87) samples were collected from drinking fountains, cooking outlets and sinks throughout the school. Including sinks as sampling locations speaks to your proactive approach towards understanding the water quality within the schools. Two additional samples locations were not sampled (2 drinking fountains-not installed yet). The results show the following:

- 66 samples (75.86%), below the detection level (<1)
- 13 samples (14.94%), between 1ppb and 5ppb
- 3 samples (3.45%), between 5ppb and 10ppb
- 2 samples (2.30%), between 10ppb and 15ppb
- 3 samples (3.45%) greater than 15ppb.

Ninety-six percent (96.55%) of the sample results were below the detection level or below the federal action level.

Fifteen parts per billion (ppb) is the federal Lead and Copper Rule action level; desired results are below 15. The federal action level of 15ppb pertains to water utilities and the GCWW' review and comments are based on this action level. However, the USEPA 3Ts Guidelines document outlines practices for schools to put in place if samples are greater than 20 ppb.

While we strive to have results less than 15, we recognize that lead is a pervasive environmental contaminant, and no safe blood lead threshold has been identified in children or adults. Therefore, we provide recommendations to further reduce any lead levels discovered in your school.

Next steps

GCWW has reviewed the results from your samples and provides some next-steps comments:

1. Overall, 3 of 87 samples had a high lead level. All others were below the detection level OR below the federal action level of 15ppb and below the 20ppb trigger level outlined in the 3Ts Guidelines for schools to take action to reduce lead. The following comments speak to ways to further reduce the risk of lead at these sample locations.



2. All the samples in the cafeteria were below the detection level; no lead detection. No further action is needed in this area.
3. The following sample locations had high lead levels:
 - A sink in the kitchen, AYER-KITCHEN-REARWALLWASH-RSINK-AYER6 (97.9)
 - A sink in room 149, AYER-FL1-149-SINK-AYER36, (17)
 - A drinking fountain, AYER-FL1-HALLWAYNEAR210-DF-AYER53 (20.9)

Particularly for the drinking fountain and the location in the kitchen, consider an immediate remedy such as taking the sample location out of service until a more defined plan can be created. For more information, refer to the 3Ts Guidelines that suggest shutting off or disconnecting problem outlets until the problem is resolved.

For the sink in room 149, particularly until the problem can be identified and a solution put in place, post a sign above the location limiting the purpose of the sink ('hand washing only', 'work sink only'). Posting a sign will deter students and staff from potentially using the sink to fill a water bottle, etc.

4. All of the sample locations in the kitchen (7) had lead detections. One sample had a high lead level (see recommendations above for this location). Work to understand what might be causing these lead detections (fixtures, etc.) and put solutions in place to further reduce the risk of lead. Consider immediate remedies such as flushing the lines (letting the water run) before use in food preparation and other kitchen functions.
5. Regarding drinking fountain sample locations, 3 of 26 locations had lead detections. Information on the highest lead level at a drinking fountain is shared above. For the other 2, work to determine what might be causing the lead levels. Review if certain drinking fountains are being used more often than others. If the fountain is not used on a regular basis, this could be contributing to the lead detections. Consider letting the water run before using the fountains until the problem with the drinking fountains is clearly identified and can be resolved.
6. For all other sample locations with lead detections, as an added precaution, consider posting signs at sink locations indicating 'hand washing only' (or other specific purposes) as these locations should not to be used as drinking water or cooking outlets. Again, posting a sign will deter students and staff from potentially using the sink to fill a water bottle, etc.
7. Review how water is being used within your facility. If water is not used on a regular basis at some of these outlets, the infrequent use at the outlet may be contributing to the lead detections. Again, signage at these locations may be helpful (hand washing only, etc.).
8. Consider completing a plumbing profile to review the fixtures in the school as some fixtures may be contributing to the lead detections in samples. If the fixtures are the source of the lead, plan to replace them. The USEPA 3Ts Guidelines outlines a great approach to creating and implementing a remediation plan. A copy of the Guidelines can be found on our website <http://www.cincinnati-oh.gov/water/assets/File/3T%20Guidance%20Manual%20for%20Schools.pdf>.

State funds are available through the new Lead Plumbing Fixture Replacement Assistance Grant Program established to provide reimbursement to eligible schools for the assessment and replacement of certain plumbing fixtures. The Program was established in House Bill 390 to provide \$12,000,000 in funding to eligible schools to reimburse for the sampling and replacement of drinking fountains, water coolers, plumbing fixtures, and limited connected piping. Schools built before 1990 can apply for reimbursement up to \$15,000 for sampling of eligible fixtures and the material costs to replace those fixtures if they are identified as being over the federal action

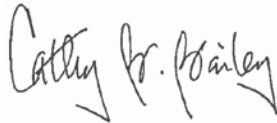
level for lead. The program is open to traditional public schools, community schools, and chartered non-public schools. Program information can be found on the Ohio Facilities Construction Commission (OFCC) Services and Programs website <http://ofcc.ohio.gov/ServicesPrograms/LeadFixtureReplacementGrants.aspx>.

9. If it hasn't occurred already, a robust communications plan is suggested. Communications plan steps are outlined in the 3Ts Guidelines. This plan will inform the school community of the sampling work the school has done to date and the steps the school will take to correct any issues discovered. GCWW employees can assist with this plan and are available to attend any school meetings to help explain our lead program, the sample results and our partnership with your school. Suggestions for language and a letter template can be provided if needed. Sampling results will be posted on the GCWW lead.mygcww.org website with other school sampling results.

Greater Cincinnati Water Works takes the presence of lead service lines and the removal of those service lines in our system very seriously. In addition, minimizing the exposure of lead within our preschools, schools, and daycares is one of our highest priorities under our Enhanced Lead Program. Please contact Jim Nelson at 591-6869 if you have any questions.

Thanks again for your partnership with Greater Cincinnati Water Works and your work to further understand the water quality within your building. Your extra steps and care to keep the children in our community safe are appreciated!

Sincerely,



Cathy B. Bailey
Director/Greater Cincinnati Water Works

Cc: Dr. Marilyn Crumpton, Cincinnati Health Department
Dr. Camille Jones, Cincinnati Health Department
Chuck DeJonckheere, Hamilton County Public Health
Sheila Hill-Christian, City of Cincinnati
Verna Arnette, Greater Cincinnati Water Works
Jeff Swertfeger, Greater Cincinnati Water Works
Jason DeLaet, Greater Cincinnati Water Works

Forest Hills School District -Ayer Elementary School - Lead Testing Results

SAMPLE #	SAMPLE DATE	SAMPLE TIME	SAMPLE	PARAMETER CODE	AMOUNT	GCWW COMMENTS/REVIEW/RECOMMENDATIONS REGARDING RESULTS
AYER1	1/25/2017	6:00:00	AYER-KITCHEN-WASHRM-HANDSINK-AYER1	Lead, ppb	12.1	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER2	1/25/2017	6:00:00	AYER-KITCHEN-NEARWASHRM-UTILITYSINK-AYER2	Lead, ppb	10.8	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER3	1/25/2017	6:00:00	AYER-KITCHEN-STOCKPOT-FILLER-AYER3	Lead, ppb	4.27	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER4	1/25/2017	6:01:00	AYER-KITCHEN-REARWALL-UTILITYSINK-AYER4	Lead, ppb	9.88	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER5	1/25/2017	6:01:00	AYER-KITCHEN-REARWALLWASH-LSINK-AYER5	Lead, ppb	5.94	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER6	1/25/2017	6:00:00	AYER-KITCHEN-REARWALLWASH-RSINK-AYER6	Lead, ppb	97.9	Above 15ppb federal action level and the 20ppb trigger level to take action as explained in the USEPA 3Ts Guidelines for schools. Until a defined remediation plan is created, immediately remove from service (tag out of service and/or disconnect the water supply to this location).
AYER7	1/25/2017	6:00:00	AYER-KITCHEN-NEAROFF-HANDSINK-AYER7	Lead, ppb	2.37	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER8	1/25/2017	6:08:00	AYER-FL1-CAFETERIA-LDF-AYER8	Lead, ppb	<1	Less than detection level
AYER9	1/25/2017	6:06:00	AYER-FL1-CAFETERIA-RCOMBODF-AYER9	Lead, ppb	<1	Less than detection level
AYER10	1/25/2017	6:06:00	AYER-FL1-CAFETERIA-RCOMBOBF-AYER10	Lead, ppb	<1	Less than detection level
AYER11	1/25/2017	6:00:00	AYER-FL1-HALLWAYNEARGYM-DF-AYER11	Lead, ppb	<1	Less than detection level
AYER12	1/25/2017	6:10:00	AYER-FL1-DOCKHALLWAYLRR-SINK-AYER12	Lead, ppb	1.44	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.

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AYER13	1/25/2017	6:10:00	AYER-FL1-DOCKHALLWAYRRR-SINK-AYER13	Lead, ppb	1.73	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER14	1/25/2017	6:14:00	AYER-CAFETERIA-GIRLSRR-LSINK-AYER14	Lead, ppb	<1	Less than detection level
AYER15	1/25/2017	6:14:00	AYER-CAFETERIA-GIRLSRR-MSINK-AYER15	Lead, ppb	<1	Less than detection level
AYER16	1/25/2017	6:14:00	AYER-CAFETERIA-GIRLSRR-RSINK-AYER16	Lead, ppb	<1	Less than detection level
AYER17	1/25/2017	6:00:00	AYER-CAFETERIA-BOYSRR-LSINK-AYER17	Lead, ppb	<1	Less than detection level
AYER18	1/25/2017	6:00:00	AYER-CAFETERIA-BOYSRR-MSINK-AYER18	Lead, ppb	<1	Less than detection level
AYER19	1/25/2017	6:00:00	AYER-CAFETERIA-BOYSRR-RSINK-AYER19	Lead, ppb	<1	Less than detection level
AYER20	1/25/2017	6:14:00	AYER-FL1-STAFFLOUNGE138-SINK-AYER20	Lead, ppb	<1	Less than detection level
AYER21	1/25/2017	6:17:00	AYER-FL1-STAFFLOUNGEHALLWAYLRR-SINK-AYER21	Lead, ppb	4.69	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER22	1/25/2017	6:18:00	AYER-FL1-STAFFLOUNGEHALLWAYMRR-SINK-AYER22	Lead, ppb	<1	Less than detection level
AYER23	1/25/2017	6:17:00	AYER-FL1STAFFLOUNGEHALLWAYRRR-SINK-AYER23	Lead, ppb	1.27	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER24	1/25/2017	6:18:00	AYER-FL1-161/162-SINK-AYER24	Lead, ppb	<1	Less than detection level
AYER25	1/25/2017	6:18:00	AYER-FL1-161/162-DF-AYER25	Lead, ppb	<1	Less than detection level
AYER26	1/25/2017	6:08:00	AYER-FL1-163/164-SINK-AYER26	Lead, ppb	<1	Less than detection level
AYER27	1/25/2017	6:18:00	AYER-FL1-163/164-DF-AYER27	Lead, ppb	<1	Less than detection level
AYER28	1/25/2017	6:20:00	AYER-FL1-165/166-SINK-AYER28	Lead, ppb	<1	Less than detection level
AYER29	1/25/2017	6:20:00	AYER-FL1-165/166-DF-AYER29	Lead, ppb	<1	Less than detection level
AYER30	1/25/2017	6:22:00	AYER-FL1-167/168-SINK-AYER30	Lead, ppb	<1	Less than detection level
AYER31	1/25/2017	6:22:00	AYER-FL1-167/168-DF-AYER31	Lead, ppb	<1	Less than detection level
AYER32	1/25/2017	6:23:00	AYER-FL1-169/170-SINK-AYER32	Lead, ppb	<1	Less than detection level
AYER33	1/25/2017	6:23:00	AYER-FL1-169/170-DF-AYER33	Lead, ppb	<1	Less than detection level
AYER34	1/25/2017	6:24:00	AYER-FL1-171/172-SINK-AYER34	Lead, ppb	<1	Less than detection level
AYER35	1/25/2017	6:24:00	AYER-FL1-171/172-DF-AYER35	Lead, ppb	<1	Less than detection level
AYER36	1/25/2017	6:25:00	AYER-FL1-149-SINK-AYER36	Lead, ppb	17	Above 15ppb federal action level. Until a defined remediation plan is created, immediately remove from service (tag out of service and/or disconnect the water supply to this location).

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AYER37	1/25/2017	6:25:00	AYER-FL1-HALLWAYNEAR159-DF-AYER37	Lead, ppb	2.3	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER38	1/25/2017	6:27:00	AYER-FL1-GIRLSRRNEAR197-LSINK-AYER38	Lead, ppb	<1	Less than detection level
AYER39	1/25/2017	6:27:00	AYER-FL1-GIRLSRRNEAR197-MSINK-AYER39	Lead, ppb	<1	Less than detection level
AYER40	1/25/2017	6:27:00	AYER-FL1-GIRLSRRNEAR197-RSINK-AYER40	Lead, ppb	<1	Less than detection level
AYER41	1/25/2017	6:25:00	AYER-FL1-197ART-SINK-AYER41	Lead, ppb	1.47	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER42	1/25/2017	6:25:00	AYER-FL1-197ART-LSINK-AYER42	Lead, ppb	<1	Less than detection level
AYER43	1/25/2017	6:25:00	AYER-FL1-197ART-RSINK-AYER43	Lead, ppb	<1	Less than detection level
AYER44	1/25/2017	6:30:00	AYER-OLDANNEX-HANDYRR-SINK-AYER44	Lead, ppb	1.96	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER45	1/25/2017	6:30:00	AYER-OLDANNEX-NEWRR-SINK-AYER45	Lead, ppb	<1	Less than detection level
AYER46	1/25/2017	6:29:00	AYER-OLDANNEX-191-SINK-AYER46	Lead, ppb	2.64	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER47	1/25/2017	6:29:00	AYER-OLDANNEX-191-DF-AYER47	Lead, ppb	<1	Less than detection level
AYER48	1/25/2017	6:30:00	AYER-OLDANNEX-192-SINK-AYER48	Lead, ppb	<1	Less than detection level
AYER49	1/25/2017	6:30:00	AYER-OLDANNEX-192-DF-AYER49	Lead, ppb	<1	Less than detection level
AYER50	1/25/2017	6:30:00	AYER-FL1-BOYSRRNEAR210-LSINK-AYER50	Lead, ppb	<1	Less than detection level
AYER51	1/25/2017	6:30:00	AYER-FL1-BOYSRRNEAR210-MSINK-AYER51	Lead, ppb	<1	Less than detection level
AYER52	1/25/2017	6:30:00	AYER-FL1-BOYSRRNEAR210-RSINK-AYER52	Lead, ppb	<1	Less than detection level
AYER53	1/25/2017	6:31:00	AYER-FL1-HALLWAYNEAR210-DF-AYER53	Lead, ppb	20.9	Above 15ppb federal action level and the 20ppb trigger level to take action as explained in the USEPA 3Ts Guidelines for schools. Until a defined remediation plan is created, immediately remove from service (tag out of service and/or disconnect the water supply to this location).

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SAMPLE #	SAMPLE DATE	SAMPLE TIME	SAMPLE	PARAMETER CODE	AMOUNT	GCWW COMMENTS/REVIEW/RECOMMENDATIONS REGARDING RESULTS
AYER54	1/25/2017	6:31:00	AYER-FL1-ECSCCLASSRM-SINK-AYER54	Lead, ppb	1.59	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER55	1/25/2017	6:31:00	AYER-FL1-ECSCCLASSRM-DF-AYER55	Lead, ppb	1.04	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER56	1/25/2017	6:37:00	AYER-FL1-158-SINK-AYER56	Lead, ppb	2.3	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER57	1/25/2017	6:37:00	AYER-FL1-158-DF-AYER57	Lead, ppb	<1	Less than detection level
AYER58	1/25/2017	6:36:00	AYER-NEWANNEX-RRNEAR203-SINK-AYER58	Lead, ppb	<1	Less than detection level
AYER59	1/25/2017	6:35:00	AYER-NEWANNEX-202-SINK-AYER59	Lead, ppb	6.62	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
AYER60	1/25/2017	6:35:00	AYER-NEWANNEX-202-DF-AYER60	Lead, ppb	<1	Less than detection level
AYER61	1/25/2017	6:38:00	AYER-NEWANNEX-204-SINK-AYER61	Lead, ppb	<1	Less than detection level
AYER62	1/25/2017	6:38:00	AYER-NEWANNEX-204-DF-AYER62	Lead, ppb	<1	Less than detection level
AYER63	1/25/2017	6:35:00	AYER-NEWANNEX-205-SINK-AYER63	Lead, ppb	<1	Less than detection level
AYER64	1/25/2017	6:35:00	AYER-NEWANNEX-205-DF-AYER64	Lead, ppb	<1	Less than detection level
AYER65	1/25/2017	6:40:00	AYER-NEWANNEX-KINDERLRR-SINK-AYER65	Lead, ppb	<1	Less than detection level
AYER66	1/25/2017	6:40:00	AYER-NEWANNEX-KINDERRRR-SINK-AYER66	Lead, ppb	<1	Less than detection level
AYER67	N/A	N/A	AYER-NEWANNEX-OUTSIDEREARPG-LDF-AYER67	N/A	N/A	DRINKING FOUNTAIN IS NOT INSTALLED YET
AYER68	N/A	N/A	AYER-NEWANNEX-OUTSIDEREARPG-RDF-AYER68	N/A	N/A	DRINKING FOUNTAIN IS NOT INSTALLED YET
AYER69	1/25/2017	6:43:00	AYER-FL1-184/183-SINK-AYER69	Lead, ppb	<1	Less than detection level
AYER70	1/25/2017	6:43:00	AYER-FL1-184/183-DF-AYER70	Lead, ppb	<1	Less than detection level
AYER71	1/25/2017	6:42:00	AYER-FL1-182/181-SINK-AYER71	Lead, ppb	<1	Less than detection level
AYER72	1/25/2017	6:42:00	AYER-FL1-182/181-DF-AYER72	Lead, ppb	<1	Less than detection level
AYER73	1/25/2017	6:43:00	AYER-FL1-180/179-SINK-AYER73	Lead, ppb	<1	Less than detection level
AYER74	1/25/2017	6:43:00	AYER-FL1-180/179-DF-AYER74	Lead, ppb	<1	Less than detection level
AYER75	1/25/2017	6:43:00	AYER-FL1-178/177-SINK-AYER75	Lead, ppb	<1	Less than detection level
AYER76	1/25/2017	6:45:00	AYER-FL1-178/177-DF-AYER76	Lead, ppb	<1	Less than detection level
AYER77	1/25/2017	6:45:00	AYER-FL1-176/175-SINK-AYER77	Lead, ppb	<1	Less than detection level
AYER78	1/25/2017	6:45:00	AYER-FL1-176/175-DF-AYER78	Lead, ppb	<1	Less than detection level

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AYER79	1/25/2017	6:45:00	AYER-FL1-174/173-SINK-AYER79	Lead, ppb	<1	Less than detection level
AYER80	1/25/2017	6:45:00	AYER-FL1-174/173-DF-AYER80	Lead, ppb	<1	Less than detection level
AYER81	1/25/2017	6:50:00	AYER-FL1-BOYSRRNEARMEDIACENTER-LSINK-AYER81	Lead, ppb	<1	Less than detection level
AYER82	1/25/2017	6:50:00	AYER-FL1-BOYSRRNEARMEDIACENTER-MSINK-AYER82	Lead, ppb	<1	Less than detection level
AYER83	1/25/2017	6:50:00	AYER-FL1-BOYSRRNEARMEDIACENTER-RSINK-AYER83	Lead, ppb	<1	Less than detection level
AYER84	1/25/2017	6:50:00	AYER-FL1-GIRLSRRNEARMEDIACENTER-LSINK-AYER84	Lead, ppb	<1	Less than detection level
AYER85	1/25/2017	6:50:00	AYER-FL1-GIRLSRRNEARMEDIACENTER-MSINK-AYER85	Lead, ppb	<1	Less than detection level
AYER86	1/25/2017	6:50:00	AYER-FL1-GIRLSRRNEARMEDIACENTER-RSINK-AYER86	Lead, ppb	<1	Less than detection level
AYER87	1/25/2017	6:48:00	AYER-MAINOFF-132HEALTHCLINIC-SINK-AYER87	Lead, ppb	<1	Less than detection level
AYER88	1/25/2017	6:48:00	AYER-MAINOFF-132HEALTHCLINIC-DF-AYER88	Lead, ppb	<1	Less than detection level
AYER89	1/25/2017	6:49:00	AYER-MAINOFF-132HEALTHCLINICRR-SINK-AYER89	Lead, ppb	<1	Less than detection level