



March 8, 2017

Wilson Elementary

School

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

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 Wilson 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, sixty-six (66) 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. The results show the following:

- 41 samples (62.12%), below the detection level (<1)
- 24 samples (36.36%), between 1ppb and 5ppb
- 0 samples (0%), between 5ppb and 10ppb
- 0 samples (0%), between 10ppb and 15ppb
- 1 sample (1.52%) greater than 15ppb.

Ninety-eight percent (98.48%) 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, 1 of 66 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. One sample had a high lead detection greater than 15ppb (kitchen sink). Consider an immediate remedy such as taking the sample location out of service until a more defined plan can be created OR 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. For more information, refer to the 3Ts Guidelines that suggest shutting off or disconnecting problem outlets until the problem is resolved.
3. Three (3) of six (6) sample locations in the kitchen/cafeteria had a lead detection. Two sample locations had low lead levels; consider flushing the line (letting the water run) before using the water from these 2 locations.
4. Although low lead levels, eight (8) of twenty-one (21) drinking fountain samples had a lead detection. Consider letting these fountains run before using the water. Work to identify what might be causing the lead detections at the drinking fountains and plan to further reduce the risk of lead at these locations.
5. 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. Refer to the USEPA 3Ts Guidelines for more information and suggestions on signage.
6. 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.).

7. 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>.

8. 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,

A handwritten signature in black ink that reads "Cathy B. Bailey". The signature is written in a cursive style with a large initial 'C' and a long, sweeping tail on the 'y'.

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 - Wilson Elementary School - Lead Testing Results

SAMPLE #	SAMPLE DATE	SAMPLE TIME	SAMPLE	PARAMETER CODE	AMOUNT	GCWW COMMENTS/REVIEW/RECOMMENDATIONS REGARDING RESULTS
WIL1	1/27/2017	6:00:00	WIL-KITCHEN-STOCKPOT-FILLER-WIL1	Lead, ppb	1.57	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL2	1/27/2017	6:00:00	WIL-KITCHEN-NEARFRIDGE-SINK-WIL2	Lead, ppb	57.7	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).
WIL3	1/27/2017	6:00:00	WIL-KITCHEN-HANDSINK-WIL3	Lead, ppb	<1	Less than detection level
WIL4	1/27/2017	6:00:00	WIL-KITCHEN-NEARHANDSINK-SINK-WIL4	Lead, ppb	<1	Less than detection level
WIL5	1/27/2017	6:02:00	WIL-KITCHEN-STAFFRR-SINK-WIL5	Lead, ppb	1.27	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL6	1/27/2017	6:02:00	WIL-FL1-CAFETERIA-DF-WIL6	Lead, ppb	<1	Less than detection level
WIL7	1/27/2017	6:02:00	WIL-FL1-ARTROOM-SINK-WIL7	Lead, ppb	<1	Less than detection level
WIL8	1/27/2017	6:04:00	WIL-FL1-BOYSRRNEARCAFE-SINK-WIL8	Lead, ppb	<1	Less than detection level
WIL9	1/27/2017	6:02:00	WIL-FL1-GIRLSRRNEARCAFE-SINK-WIL9	Lead, ppb	<1	Less than detection level
WIL10	1/27/2017	6:05:00	WIL-FL1-MAINOFFICESTAFFRR-SINK-WIL10	Lead, ppb	<1	Less than detection level
WIL11	1/27/2017	6:09:00	WIL-FL1-HEALTHCLINICRR-SINK-WIL11	Lead, ppb	<1	Less than detection level
WIL12	1/27/2017	6:09:00	WIL-FL1-BOYSRRNEARLOUNGE-LSINK-WIL12	Lead, ppb	<1	Less than detection level
WIL13	1/27/2017	6:09:00	WIL-FL1-BOYSRRNEARLOUNGE-MSINK-WIL13	Lead, ppb	<1	Less than detection level
WIL14	1/27/2017	6:09:00	WIL-FL1-BOYSRRNEARLOUNGE-RSINK-WIL14	Lead, ppb	<1	Less than detection level
WIL15	1/27/2017	6:10:00	WIL-FL1-GIRLSRRNEARLOUNGE-LSINK-WIL15	Lead, ppb	3.77	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL16	1/27/2017	6:09:00	WIL-FL1-GIRLSRRNEARLOUNGE-MSINK-WIL16	Lead, ppb	<1	Less than detection level
WIL17	1/27/2017	6:09:00	WIL-FL1-GIRLSRRNEARLOUNGE-RSINK-WIL17	Lead, ppb	<1	Less than detection level
WIL18	1/27/2017	6:09:00	WIL-FL1-HALLWAYNEARLOUNGE-DF-WIL18	Lead, ppb	<1	Less than detection level
WIL19	1/27/2017	6:13:00	WIL-FL1-FACULTYLOUNGE-SINK-WIL19	Lead, ppb	<1	Less than detection level
WIL20	1/27/2017	6:13:00	WIL-FL1-FACULTYLOUNGERR-SINK-WIL20	Lead, ppb	<1	Less than detection level
WIL21	1/27/2017	6:15:00	WIL-FL1-RM6-SINK-WIL21	Lead, ppb	<1	Less than detection level

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WIL22	1/27/2017	6:16:00	WIL-FL1-RM6-DF-WIL22	Lead, ppb	1.95	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL23	1/27/2017	6:15:00	WIL-FL1-RM5-SINK-WIL23	Lead, ppb	2.63	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL24	1/27/2017	6:15:00	WIL-FL1-RM5-DF-WIL24	Lead, ppb	<1	Less than detection level
WIL25	1/27/2017	6:18:00	WIL-FL1-RM4-SINK-WIL25	Lead, ppb	<1	Less than detection level
WIL26	1/27/2017	6:18:00	WIL-FL1-RM4-DF-WIL26	Lead, ppb	2.43	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL27	1/27/2017	6:19:00	WIL-FL1-RM3-SINK-WIL27	Lead, ppb	2.79	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL28	1/27/2017	6:19:00	WIL-FL1-RM3-DF-WIL28	Lead, ppb	<1	Less than detection level
WIL29	1/27/2017	6:20:00	WIL-FL1-RM2-SINK-WIL29	Lead, ppb	1.26	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL30	1/27/2017	6:20:00	WIL-FL1-RM2-DF-WIL30	Lead, ppb	3.27	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL31	1/27/2017	6:22:00	WIL-FL1-RM1-SINK-WIL31	Lead, ppb	3.4	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL32	1/27/2017	6:22:00	WIL-FL1-RM1-DF-WIL32	Lead, ppb	1.77	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL33	1/27/2017	6:20:00	WIL-FL1-MAINSINKBOYS-BRADLEYHANDSINK-WIL33	Lead, ppb	<1	Less than detection level
WIL34	1/27/2017	6:20:00	WIL-FL1-MAINSINKGIRLS-BRADLEYHANDSINK-WIL34	Lead, ppb	<1	Less than detection level

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WIL35	1/27/2017	6:22:00	WIL-FL1-MAINSINKAREA-HANDSINK-WIL35	Lead, ppb	<1	Less than detection level
WIL36	1/27/2017	6:09:00	WIL-FL1-MAINSINKAREA-LDF-WIL36	Lead, ppb	<1	Less than detection level
WIL37	1/27/2017	6:09:00	WIL-FL1-MAINSINKAREA-MDF-WIL37	Lead, ppb	<1	Less than detection level
WIL38	1/27/2017	6:09:00	WIL-FL1-MAINSINKAREA-RDF-WIL38	Lead, ppb	<1	Less than detection level
WIL39	1/27/2017	6:25:00	WIL-FL1-RM21A-SINK-WIL39	Lead, ppb	2.3	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL40	1/27/2017	6:27:00	WIL-PRIMWING-RM15-SINK-WIL40	Lead, ppb	1.01	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL41	1/27/2017	6:26:00	WIL-PRIMWING-RM15-DF-WIL41	Lead, ppb	<1	Less than detection level
WIL42	1/27/2017	6:09:00	WIL-PRIMWING-RM16-SINK-WIL42	Lead, ppb	3.17	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL43	1/27/2017	6:09:00	WIL-PRIMWING-RM16-DF-WIL43	Lead, ppb	<1	Less than detection level
WIL44	1/27/2017	6:09:00	WIL-PRIMWING-RM17-SINK-WIL44	Lead, ppb	1.54	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL45	1/27/2017	6:09:00	WIL-PRIMWING-RM17-DF-WIL45	Lead, ppb	2.85	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL46	1/27/2017	6:09:00	WIL-PRIMWING-RM18-SINK-WIL46	Lead, ppb	1.64	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL47	1/27/2017	6:09:00	WIL-PRIMWING-RM18-DF-WIL47	Lead, ppb	<1	Less than detection level
WIL48	1/27/2017	6:26:00	WIL-PRIMWING-RM19-SINK-WIL48	Lead, ppb	<1	Less than detection level
WIL49	1/27/2017	6:26:00	WIL-PRIMWING-RM19-DF-WIL49	Lead, ppb	<1	Less than detection level
WIL50	1/27/2017	6:26:00	WIL-PRIMWING-RM20-SINK-WIL50	Lead, ppb	<1	Less than detection level
WIL51	1/27/2017	6:26:00	WIL-PRIMWING-RM20-DF-WIL51	Lead, ppb	<1	Less than detection level
WIL52	1/27/2017	6:32:00	WIL-PRIMWING-K1-LSINK-WIL52	Lead, ppb	<1	Less than detection level
WIL53	1/27/2017	6:32:00	WIL-PRIMWING-K1-LDF-WIL53	Lead, ppb	<1	Less than detection level

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WIL54	1/27/2017	6:32:00	WIL-PRIMWING-K1-RSINK-WIL54	Lead, ppb	1.13	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL55	1/27/2017	6:29:00	WIL-PRIMWING-K1-RDF-WIL55	Lead, ppb	1.82	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL56	1/27/2017	6:29:00	WIL-PRIMWING-K2-LSINK-WIL56	Lead, ppb	3.67	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL57	1/27/2017	6:35:00	WIL-PRIMWING-K2-LDF-WIL57	Lead, ppb	1.13	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL58	1/27/2017	6:35:00	WIL-PRIMWING-K2-RSINK-WIL58	Lead, ppb	4.46	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL59	1/27/2017	6:35:00	WIL-PRIMWING-K2-RDF-WIL59	Lead, ppb	1.04	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL60	1/27/2017	6:09:00	WIL-PRIMWING-K3-SINK-WIL60	Lead, ppb	<1	Less than detection level
WIL61	1/27/2017	6:09:00	WIL-GYM-GIRLSRR-LSINK-WIL61	Lead, ppb	<1	Less than detection level
WIL62	1/27/2017	6:41:00	WIL-GYM-GIRLSRR-MSINK-WIL62	Lead, ppb	<1	Less than detection level
WIL63	1/27/2017	6:09:00	WIL-GYM-GIRLSRR-RSINK-WIL63	Lead, ppb	1.48	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
WIL64	1/27/2017	6:40:00	WIL-GYM-BOYSRR-LSINK-WIL64	Lead, ppb	<1	Less than detection level
WIL65	1/27/2017	6:41:00	WIL-GYM-BOYSRR-RSINK-WIL65	Lead, ppb	<1	Less than detection level
WIL66	1/27/2017	6:40:00	WIL-GYM-DF-WIL66	Lead, ppb	<1	Less than detection level