

August 16, 2017

St. Aloysius of Gonzaga School Dale Merz 4390 Bridgetown Road Cincinnati, OH 45211

Dear Mr. Merz:

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

Attached please find the results of the lead analyses performed for the St. Aloysius of Gonzaga School and Church 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

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 April, sixty-two (62) samples were collected from drinking fountains, cooking outlets and sinks throughout the school. One additional location was not sampled. The results show the following:

- 33 samples (53.23%), below the detection level (<1)
- · 21 samples (33.87%), between 1ppb and 5ppb
- · 1 sample (1.61%), between 5ppb and 10ppb
- · 2 samples (3.23%), between 10ppb and 15ppb
- 5 samples (8.06%) greater than 15ppb.

Nearly ninety-two percent (91.94%) 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 Greater Cincinnati Water Works 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.

Next steps

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

SCHOOL

Two drinking fountains (SAG-FL2SCH-HALLWAYNEAR26-DF-SAG4 and SAG-BASESCH-HALLWAYNEAR7-DF-SAG23) had low lead levels. To further reduce these levels, consider
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flushing the line before use (letting the water run). No lead was detected at the other drinking fountains; no further action is suggested.

- 2. One sink (SAG-FL2SCH-26BACKLEFTISLAND-SINK-SAG11) in the school had a lead level greater than the federal action level of 15ppb and greater than the trigger level of 20ppb as suggested by the 3Ts Guidelines for schools to take action. 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 limiting the use at this location. Refer to the USEPA 3Ts Guidelines for more information and suggestions on signage.
- 3. One bottle filler location in the gym (SAG-GYM-BF-SAG39) had a lead level greater than the federal action level of 15ppb. Consider an immediate remedy such as taking the sample location out of service until a more defined plan can be created. Work to then understand what might be contributing to the lead value. If this location is not used on a regular basis, the infrequent use may be contributing to the lead detection.
- 4. Two kitchen sinks had low lead detections. These levels are very low, close to the detection level. Flushing before use may reduce the lead level.
- 5. Other sinks had lead detections. Based on the sample names, these are not drinking water or cooking outlets. Lead is not an issue for body contact such as bathing, showering, and washing hands. However, it is assumed that the school wants to further reduce all lead detections identified. We have known and learned from other schools (that are participating in this program) that cleaning the faucet and aerator may reduce the lead levels. This is due to the cleaning that removes trapped particles on the aerator. Consider removing the aerators and cleaning them as part of a plan to reduce the risk of lead. Resampling and retesting can occur after cleaning; GCWW can assist with this.
- 6. Review how water is being used within the school. 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. This might be the case in the science room. Signage at these locations may be helpful (hand washing only, not for drinking, etc.).
- 7. You might want to consider this after cleaning aerators and resampling (if the results are not reduced after the cleaning).

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.cincinnatioh.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.

CHURCH

- 1. Two of the three drinking fountains (SAG-BASECH-HALLWAYNEARKIT-LDF-SAG44 and SAG-BASECH-HALLWAYNEARKIT-RDF-SAG45) in the church had low lead levels. To further reduce these levels, consider flushing the line before use (letting the water run). No lead was detected at the other drinking fountain; no further action is suggested.
- 2. A sink in a guest restroom (SAG-FL2DORM-GUESTRR-SINK-SAG56) had a high lead level. It was mentioned to GCWW staff during the walkthrough that this location is not used often. If this sink is not used on a regular basis, then the infrequent use may be contributing to the lead level. This might be the case for this location and the priest restroom sink (SAG-FL2DORM-PRIESTRR-SINK-SAG58). Post a sign above the locations or in the restrooms limiting the purpose of the sinks ('hand washing only', 'work sink only', 'for art class only-not for drinking purposes', etc.). Posting a sign will deter students and staff from potentially using the sinks to fill a water bottle, etc.
- 3. A restroom sink in the basement annex (SAG-BASEANEX-RR-SINK-SAG60) had a lead level greater than the federal action level of 15ppb and greater than the trigger level of 20ppb as suggested by the 3Ts Guidelines for schools to take action. It was mentioned this area is being remodeled to become a preschool. Work to understand what might be contributing to this lead detection. Infrequent use may be contributing to this lead detection. The usage at this location should change when the area is used as a preschool. Work to reduce the risk of lead before the preschool is established.
- 4. The other sinks in the proposed preschool area also had lead detections. If the kitchen sink is used now, consider flushing the line before use (letting the water run).
- 5. Other sinks had lead detections. Based on the sample names, these are not drinking water or cooking outlets. As mentioned before, lead is not an issue for body contact such as bathing, showering, and washing hands. However, it is assumed that the school wants to further reduce all lead detections identified. We have known and learned from other schools (that are participating in this program) that cleaning the faucet and aerator may reduce the lead levels. This is due to the cleaning that removes trapped particles on the aerator. Consider removing the aerators and cleaning them as part of a plan to reduce the risk of lead. Resampling and retesting can occur after cleaning; GCWW can assist with this.

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 buildings. 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



Cincinnati Archdiocese - St. Aloysius of Gonzaga School and Church - Lead Testing Results						
SAMPLE #	SAMPLE DATE	SAMPLE TIME	SAMPLE	PARAMETER, CODE	AMOUNT	GCWW COMMENTS/REVIEW/ RECOMMENDATIONS REGARDING RESULTS
SAG1	4/25/2017	6:01	SAG-FL1SCH-MAINOFFRR-SINK-SAG1	Lead, ppb	1.36	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG2	4/25/2017	6:02	SAG-FL1SCH-HALLWAYNEAR16-DF-SAG2	Lead, ppb	<1	Less than detection level
SAG3	4/25/2017	6:04	SAG-FL1SCH-HALLWAYNEARMUSIC-DF-SAG3	Lead, ppb	<1	Less than detection level
SAG4	4/25/2017	6:06	SAG-FL2SCH-HALLWAYNEAR26-DF-SAG4	Lead, ppb	3.07	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG5	4/25/2017	6:07	SAG-FL2SCH-HALLWAYNEAR28-DF-SAG5	Lead, ppb	<1	Less than detection level
SAG6	4/25/2017	6:08	SAG-FL2SCH-26FRONTDESK-SINK-SAG6	Lead, ppb	<1	Less than detection level
SAG7	4/25/2017	6:08	SAG-FL2SCH-26FRONTLEFTISLAND-SINK-SAG7	Lead, ppb	2.13	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG8	4/25/2017	6:08	SAG-FL2SCH-26FRONTRIGHTISLAND-SINK-SAG8	Lead, ppb	<1	Less than detection level
SAG9	4/25/2017	6:09	SAG-FL2SCH-26MIDDLELEFTISLAND-SINK-SAG9	Lead, ppb	<1	Less than detection level
SAG10	4/25/2017	6:09	SAG-FL2SCH-26MIDDLERIGHTISLAND-SINK-SAG10	Lead, ppb	5.23	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG11	4/25/2017	6:10	SAG-FL2SCH-26BACKLEFTISLAND-SINK-SAG11	Lead, ppb	40.9	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).
SAG12	4/25/2017	6:11	SAG-FL2SCH-26BACKRIGHTISLAND-SINK-SAG12	Lead, ppb	3.1	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG13	4/25/2017	6:15	SAG-FL2SCH-HEALTHRR-SINK-SAG13	Lead, ppb	1.3	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.



	Ci	ncinnati <i>i</i>	Archdiocese - St. Aloysius of Gonzaga School a	nd Church - L	ead Testi	ng Results
SAMPLE #	SAMPLE DATE	SAMPLE TIME	SAMPLE	PARAMETER, CODE	AMOUNT	GCWW COMMENTS/REVIEW/ RECOMMENDATIONS REGARDING RESULTS
SAG14	4/25/2017	6:15	SAG-BASESCH-KITSTOCKPOT-FILLER-SAG14	Lead, ppb	1.15	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG15	4/25/2017	6:16	SAG-BASESCH-KIT2TUBNEARWINDOW-SINK-SAG15	Lead, ppb	1.1	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG16	4/25/2017	6:17	SAG-BASESCH-KIT2TUBW/SPRAYER-LSINK-SAG16	Lead, ppb	<1	Less than detection level
SAG17	4/25/2017	6:17	SAG-BASESCH-KIT2TUBW/SPRAYER-RSINK-SAG17	Lead, ppb	<1	Less than detection level
SAG18	4/25/2017	6:17	SAG-BASESCH-KIT2TUBW/SPRAYER-SPRAYER-SAG18	Lead, ppb	<1	Less than detection level
SAG19	4/25/2017	6:18	SAG-BASESCH-KIT-HANDSINK-SAG19	Lead, ppb	1.15	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG20	4/25/2017	6:19	SAG-BASESCH-7-LSINK-SAG20	Lead, ppb	1.49	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG21	4/25/2017	6:20	SAG-BASESCH-7-RSINK-SAG21	Lead, ppb	<1	Less than detection level
SAG22	4/25/2017	6:20	SAG-BASESCH-7RR-SINK-SAG22	Lead, ppb	1.98	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG23	4/25/2017	6:20	SAG-BASESCH-HALLWAYNEAR7-DF-SAG23	Lead, ppb	2.34	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG24	4/25/2017	6:21	SAG-BASESCH-BOYSRR-LSINK-SAG24	Lead, ppb	1.02	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG25	4/25/2017	6:21	SAG-BASESCH-BOYSRR-MSINK-SAG25	Lead, ppb	<1	Less than detection level
SAG26	4/25/2017	6:21	SAG-BASESCH-BOYSRR-RSINK-SAG26	Lead, ppb	<1	Less than detection level
SAG27	4/25/2017	6:21	SAG-BASESCH-GIRLSRR-LSINK-SAG27	Lead, ppb	2.14	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.



Cincinnati Archdiocese - St. Aloysius of Gonzaga School and Church - Lead Testing Results						
SAMPLE #	SAMPLE DATE	SAMPLE TIME	SAMPLE	PARAMETER, CODE	AMOUNT	GCWW COMMENTS/REVIEW/ RECOMMENDATIONS REGARDING RESULTS
SAG28	4/25/2017	6:21	SAG-BASESCH-GIRLSRR-MSINK-SAG28	Lead, ppb	1.03	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG29	4/25/2017	6:21	SAG-BASESCH-GIRLSRR-RSINK-SAG29	Lead, ppb	<1	Less than detection level
SAG30	4/25/2017	6:22	SAG-BASESCH-CAFE-DF-SAG30	Lead, ppb	<1	Less than detection level
SAG31	4/25/2017	6:22	SAG-GYM-CONCESSION3TUB-LSINK-SAG31	Lead, ppb	<1	Less than detection level
SAG32	4/25/2017	6:22	SAG-GYM-CONCESSION3TUB-RSINK-SAG32	Lead, ppb	<1	Less than detection level
SAG33	4/25/2017	6:22	SAG-GYM-CONCESSION-HANDSINK-SAG33	Lead, ppb	4.78	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG34	4/25/2017	6:23	SAG-GYM-CONSESSION-IM-SAG34	Lead, ppb	<1	Less than detection level
SAG35	4/25/2017	6:23	SAG-GYM-BOYSRR-LSINK-SAG35	Lead, ppb	<1	Less than detection level
SAG36	4/25/2017	6:23	SAG-GYM-BOYSRR-MSINK-SAG36	Lead, ppb	<1	Less than detection level
SAG37	4/25/2017	6:23	SAG-GYM-BOYSRR-RSINK-SAG37	Lead, ppb	<1	Less than detection level
SAG38	4/25/2017	6:24	SAG-GYM-DF-SAG38	Lead, ppb	<1	Less than detection level
SAG39	4/25/2017	6:24	SAG-GYM-BF-SAG39	Lead, ppb	15.6	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).
SAG40	4/25/2017	6:24	SAG-GYM-GIRLSRR-FLSINK-SAG40	Lead, ppb	<1	Less than detection level
SAG41	4/26/2017	6:16	SAG-GYM-GIRLSRR-LSINK-SAG41	Lead, ppb	<1	Less than detection level
SAG42	4/26/2017	6:15	SAG-GYM-GIRLSRR-RSINK-SAG42	Lead, ppb	<1	Less than detection level
SAG43	4/26/2017	6:14	SAG-GYM-GIRLSRR-FRSINK-SAG43	Lead, ppb	<1	Less than detection level
			Church Samples below			
SAG44	4/26/2017	6:13	SAG-BASECH-HALLWAYNEARKIT-LDF-SAG44	Lead, ppb	2.82	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.
SAG45	4/26/2017	6:13	SAG-BASECH-HALLWAYNEARKIT-RDF-SAG45	Lead, ppb	2.13	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.



	Cincinnati Archdiocese - St. Aloysius of Gonzaga School and Church - Lead Testing Results						
SAMPLE #	SAMPLE DATE	SAMPLE TIME	SAMPLE	PARAMETER, CODE	AMOUNT	GCWW COMMENTS/REVIEW/ RECOMMENDATIONS REGARDING RESULTS	
SAG46	4/26/2017	6:12	SAG-BASECH-KIT-SINK-SAG46	Lead, ppb	4.88	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.	
SAG47	4/26/2017	6:12	SAG-FL1CH-HALLWAYNEARLIB-DF-SAG47	Lead, ppb	<1	Less than detection level	
SAG48	4/26/2017	6:05	SAG-FL1CH-HALLWAYNEARLIB-SINK-SAG48	Lead, ppb	<1	Less than detection level	
SAG49	4/26/2017	6:01	SAG-FL1CH-UNIRRNEARLIB-SINK-SAG49	Lead, ppb	<1	Less than detection level	
SAG50	4/26/2017	6:00	SAG-FL1CH-SACRISTY-SINK-SAG50	Lead, ppb	3.49	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.	
SAG51	4/26/2017	6:05	SAG-FL1CH-UNIRRNEARENT#6-SINK-SAG51	Lead, ppb	<1	Less than detection level	
SAG52	4/26/2017	6:10	SAG-FL1REC-SNACKAREA-SINK-SAG52	Lead, ppb	<1	Less than detection level	
SAG53	4/27/2017	6:05	SAG-FL2REC-OFFICEAREARR-SINK-SAG53	Lead, ppb	<1	Less than detection level	
SAG54	4/27/2017	6:07	SAG-FL1DORM-PRIESTRR-SINK-SAG54	Lead, ppb	<1	Less than detection level	
SAG55	4/27/2017	6:08	SAG-FL1DORM-PRIESTKITCHEN-SINK-SAG55	Lead, ppb	<1	Less than detection level	
SAG56	4/27/2017	6:09	SAG-FL2DORM-GUESTRR-SINK-SAG56	Lead, ppb	209	Not used often. 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).	
SAG57	4/27/2017	6:10	SAG-FL2DORM-TVAREARR-SINK-SAG57	Lead, ppb	14.7	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.	
SAG58	4/27/2017	6:10	SAG-FL2DORM-PRIESTRR-SINK-SAG58	Lead, ppb	22	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).	



Cincinnati Archdiocese - St. Aloysius of Gonzaga School and Church - Lead Testing Results							
SAMPLE #	SAMPLE DATE	SAMPLE TIME	SAMPLE	PARAMETER, CODE	AMOUNT	GCWW COMMENTS/REVIEW/ RECOMMENDATIONS REGARDING	
SAG59	4/27/2017	6:11	SAG-FL3DORM-GUESTRR-SINK-SAG59	Lead, ppb	3.06	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.	
SAG60	NO DATE	NO TIME	SAG-BASEANEX-RR-SINK-SAG60 *	Lead, ppb	41.8	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).	
	4/27/2017	6:30	SAG-FL1ANEX-KIT-SINK-SAG61 *	Lead, ppb	2.74	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.	
	4/27/2017	6:30	SAG-FL1ANEX-RR-SINK-SAG62 *	Lead, ppb	10.9	Lead detected; less than 15ppb action level. Review 3Ts Guidelines to understand options to further reduce the risk of lead.	
*ANNEX BUILDING IS GETTING REMODELED TO BECOME A PRESCHOOL. (SAMPLE# 60-62)							
	N/A	N/A	OUTSIDE DRINKING FOUNTAIN	N/A	N/A	This location was not sampled due to being turned off for the last 7 years. No plan to turn it back on.	