

December 13, 2017

Central Church of Christ Bill Vaths 3501 Cheviot Rd. Cincinnati, Ohio 45211

Dear Mr. Vaths.

Samples were collected in Round 3 of lead analyses for Central Church of Christ. Greater Cincinnati Water Works (GCWW) analyzed the samples and compared the results.

## **Sample 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. We decided to use this same process to assist child care facilities, churches, recreation centers, libraries, entertainment venues, restaurants, etc. where children are in attendance for various activities on a regular basis. It is a well-defined process and provides helpful information and remedies if lead is detected in samples.

The church performed the initial round of samples in March 2017. Some changes were made at three sample locations following this round, and a resample round then occurred in May 2017. Further changes were made and round 3 of sampling occurred in August 2017.

Central Church of Christ Lead Testing Results-Resamples								
SAMPLE	Initial 1st Draw sample Date 3/8/17 Lead, ppb	Changes made after first round of sampling		flush sample Date	flush sample Date 5/31/17	1st Draw sample Date 8/14/17 Lead, ppb	30 second flush sample Date 8/14/17 Lead, ppb	flush sample Date 8/14/17
CCC-LL-NURSERY-RR-SINK-CCC10	78.5	Cleaned or replaced the aerator; flushed the lines	4.98	7.82	<1	13.8	1.31	<1
CCC-GF-BHNDALTER-WRR-SINK-CCC17	42.2	Cleaned or replaced the aerator; flushed the lines	24.7	51	23.2	31.7	2.15	1.88
CCC-GF-BHNDALTER-MRR-SINK-CCC18	25.2	Cleaned or replaced the aerator; flushed the lines	21.5	75.8	40.2	19.3	2.95	3.95

## **Changes made and Next Steps**

- 1. After the first round of sampling, it is our understanding that the school wanted to further reduce the risk of lead at all locations. You shared with us that you cleaned one of the aerators and replaced the other two. After that, you flushed the lines. You also mentioned that these sinks are some of the least used sinks.
- 2. After cleaning and flushing the lines, sequential sampling occurred (3 samples were collected at each location: a first draw sample, a sample after letting the water run 30 seconds, a sample after letting the water 4747 Spring Grove Ave, Cincinnati OH, 45232 | Customer Service: 513.591.7700 | Director's Office: 513.591.7970







run 60 seconds). It is expected that the lead levels would be reduced after flushing the line. This practice occurred again in Round 3 of sampling.

- 3. In discussions regarding these same locations, the following information was shared regarding Round 3:
  - Fixtures are used about 4 times per month at these locations.
  - Sample location CCC10, CCC17, and CCC18; flushing occurs, at a minimum, weekly for about 5 minutes outside of their normal use.
  - Sample location CCC17 and CCC18 are original fixtures. CCC10 is a newer fixture, replaced in 2017.
  - Copper is present at the wall for all three fixtures.
- 4. Reviewing the results and the information, it appears that flushing is helping as the lead levels are reduced when flushing occurs. Based on the first draw results, it might still be a fixture issue, particularly with CCC17 and CCC18 which are original fixtures.
  - a. If these restroom sinks are not used on a regular basis, you may continue to see these elevated levels.
  - b. Flushing at these locations should continue to reduce the lead levels.
  - c. Installing newer fixtures may reduce the lead levels at these locations.
- 5. Answers to a few additional questions regarding sample location CCC10 may help us understand the situation.
  - a. While flushing certainly reduces the lead level, if the fixture is new, it is surprising that these lead levels are occurring. Even when the fixture/location is not used on a regular basis, with a new fixture, these lead levels are not expected. What information can you share specifically about the fixture? Was it recently purchased? Was it newly installed but was purchased in past years when the fixtures were permitted to have more lead material in them? Any additional information you can share with Jim Nelson regarding this might help us understand what is happening with sample location CCC10.
  - b. This is a nursery restroom and we understand that you want to reduce all lead levels as much as you can. In the meantime, as we attempt to understand this location more, work to flush this location on a more frequent basis before use.

As shared before, your work and changes in the facility continue to improve the water quality for everyone attending and participating in services and activities. Through our continued partnership, we will determine a path forward that will further reduce the lead levels. Please contact Jim Nelson at 591-6869 if you have any questions.

Sincerely,

Cathy B. Bailey

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Director/Greater Cincinnati Water Works

Cc: Jason DeLaet, Lead Program Manager, Greater Cincinnati Water Works Kathy Frey, Lead Program Liaison, Greater Cincinnati Water Works James Nelson, Lead Program Liaison, Greater Cincinnati Water Works