

Water Testing Results

Interim Summary Report - January 18, 2019

BACKGROUND

During the winter and spring of 2018, Guilford County Schools (GCS) partnered with the City of Greensboro and other municipal water suppliers to test one faucet at 99 of its 126 schools for lead and copper. Those 99 schools were facilities receiving municipal water and located on GCS-owned property. Schools with well water are governed by different regulations and are already tested frequently, so they were not included in this initial process. Schools located on college or university campuses were not included, as GCS does not own those buildings or facilities, or control the water sources.

Testing was voluntary, as it is not mandated by law in North Carolina.

One faucet each at Allen Jay Elementary, Frazier Elementary and Southeast Middle School tested positive for lead above the EPA recommended level of 15 parts per billion (ppb) (under the Lead and Copper Rule), and those faucets were immediately taken out of service. One faucet at each of nine other schools showed detectable lead levels, but those values were below the EPA action level.

During the summer and early fall, additional assessment and remedial action was conducted at Allen Jay, Frazier and Southeast, including replacement of faucets determined to be the source of the observed lead.

In an abundance of caution, starting with the first day of school in August of 2018, the district put a flushing protocol in place at each of the 99 schools while it developed a district-wide plan for water testing and remediation. The flushing protocol requires school personnel to let the water run for at least one minute from each faucet used for drinking water or food preparation prior to the arrival of students each school day. The flushing protocol, combined with anti-corrosive measures managed by our water suppliers, decreases the likelihood that lead or copper can leach into the water.

This fall, GCS hired a consulting firm, ECS Southeast, LLP (ECS), to conduct additional water quality tests of all faucets used for drinking water or food preparation at each of the 99 schools identified previously.

The water testing project started prior to winter break, and will continue until completed districtwide. Starting with 10 schools where initial tests last spring indicated some interest due to age or lead levels, the district also has prioritized the remaining schools on the basis of type (e.g., elementary), lead detections, and age of the facility.

FIRST GROUP OF TEN SCHOOLS TESTED

Using the prioritization factors listed above (school type, lead detections, and age of facility) as well as logistical factors, the following 10 schools were identified as the initial group of schools for additional testing: Allen Jay Elementary, Claxton Elementary, Falkener Elementary, Foust

Elementary, Frazier Elementary, Kirkman Park Elementary, Morehead Elementary, Penn Griffin Middle, Southeast Middle, and Swann Middle.

TESTING PROCESS

The day before each test, all faucets used for drinking water or food preparation were flushed and bagged for at least eight hours in keeping with EPA protocols. By allowing the water to stand for at least eight hours, this protocol provides an opportunity for lead and copper, if present, to leach from the faucet or pipes into the water.

A team from ECS then collected water samples from all faucets identified by GCS as used for drinking or food preparation and tested the water for lead and copper. In an abundance of caution and to protect the health of students and staff, GCS decided to use a comparison with 10 ppb for lead as an action level guideline, which is lower than the EPA-recommended action level of 15 ppb for residential homes. GCS used the EPA-recommended action level for copper – 1.3 parts per million (ppm).

For this first group of 10 schools, if test results were at or above 10 ppb for lead for a faucet, the faucet was taken out of service while additional tests were conducted to determine the source of the lead or copper. These steps included some combination of the following:

1. Flush test conducted to identify the potential cause of the elevated lead sample (e.g., faucet/fountain or piping);
2. Source remediated (e.g., faucet replaced);
3. First draw test conducted following replacement to ensure remediation was successful; and
4. Faucet or fountain placed back in service, remained out of service until pending further assessment and remediation, or taken out-of-service permanently.

Schools will continue daily flush protocols on faucets used for drinking water and food preparation, until each faucet is tested and results are shown to be below the above-stated action levels, or additional assessment and remedial measures are completed and follow up testing confirms the measures were successful.

This same general protocol outlined above will be implemented as the district proceeds to test the remaining schools.

SUMMARY OF RESULTS

As outlined in more detail in the below section summarizing results for each of the respective 10 schools in this group of additional testing:

- (1) The laboratory results for all of the samples collected from faucets used for drinking water and food preparation at the following six schools were below action-levels of 10 ppb for lead and 1.3 ppm for copper: Claxton Elementary, Falkener Elementary, Kirkman Park Elementary, Morehead Elementary, Southeast Middle, and Swann Middle. No further assessment or remedial action is necessary at these schools, which may discontinue the precautionary daily flushing measures at this time.

- (2) Results for sampling and testing at Allen Jay Elementary, Foust Elementary, Frazier Elementary, and Penn Griffin Middle indicated that two faucets at Allen Jay and one faucet at each of the other three schools were at or above 10 ppb for lead. No results were above 1.3 ppm for copper. The faucets tested with results showing elevated lead concentrations have been taken out of service pending additional assessment and remedial action, which is presently being carried out. These faucets will remain out of service until tests confirm remedial actions have been successful. As to the faucets that remain in service, these schools may discontinue the precautionary daily flushing measures at this time.

RESULTS BY SCHOOL

Allen Jay Elementary

All 35 faucets used for drinking or food preparation at Allen Jay Elementary were tested on November 21, 2018 and results were received on December 6.

Of those tested, 19 faucets had lead levels lower than the test is able to detect, and two faucets tested at or above 10 ppb.

Results from all faucets tested were below the EPA action level for copper.

Faucets testing above 10 ppb:

- A drinking station near room 11 tested above 15 ppb for lead.
 - REMEDIAL MEASURE:
 - The fixture was taken out of service before the start of the school day on Friday, December 7.
 - It was removed as a remedial measure due to general lack of use.
- A steamer fixture in the school's cafeteria tested above 10 ppb for lead.
 - REMEDIAL MEASURE:
 - The fixture was taken out of service before the start of the school day on Friday, December 7.
 - Flush testing indicated the faucet likely caused the elevated lead concentration.
 - The fixture will remain out of service pending further assessment and remedial action.

School Action

As of the date of this report, the school may discontinue daily flushing protocols with respect to the faucets that tested below action levels and remain in service.

Frazier Elementary

All 30 faucets used for drinking or food preparation at Frazier Elementary were tested on November 21, 2018 and results were received on December 6.

Of those tested, 24 faucets had lead levels lower than the test is able to detect, and one faucet tested above 10 ppb.

Results from all faucets tested were below the EPA action level for copper.

Faucet testing above 10 ppb:

- A nurse's station faucet in room 247 tested above 15 ppb for lead.
 - o REMEDIAL MEASURE:
 - The fixture was taken out of service before the start of the school day on Friday, December 7. Flush testing indicated the faucet is likely the cause of the lead concentration. Faucet was replaced.
 - First draw sample indicated lead concentration greater than the EPA level of 15 ppb.
 - The fixture remains out of service pending further assessment and remedial action.

School Action

As of the date of this report, the school may discontinue daily flushing protocols with respect to the faucets that tested below action levels and remain in service.

Foust Elementary

All 26 faucets used for drinking or food preparation at Foust Elementary were tested on December 19, 2018 and results were received on January 2, 2019.

Of those tested, 8 faucets had lead levels lower than the test is able to detect, and one faucet tested above 10 ppb.

Results from all faucets tested were below the EPA action level for copper.

Faucet testing above 10 ppb:

- Water cooler hallway near Rm 65 (left) tested above 15 ppb for lead.
 - o REMEDIAL MEASURE:
 - The fixture was taken out of service before the start of the school day on January 3.
 - Flush testing indicated the faucet is the likely cause of the lead concentration
 - The fixture will be replaced and another first draw sample taken before it is put back in service.

School Action

As of the date of this report, the school may discontinue daily flushing protocols with respect to the faucets that tested below action levels and remain in service.

Penn-Griffin School for the Arts (Middle and High)

All 27 faucets used for drinking or food preparation at Penn-Griffin were tested on December 20, 2018 and results were received on January 2, 2019.

Of those tested, 21 faucets had lead levels lower than the test is able to detect, and one faucet tested at 10 ppb.

Results from all faucets tested were below the EPA action level for copper.

Faucet testing above 10 ppb:

- Cafeteria basin pan tested at 10 ppb for lead.
 - REMEDIAL MEASURE:
 - The fixture was taken out of service before the start of the school day on January 3, 2019.
 - Flush testing indicated levels above the 15 ppb EPA level for lead.
 - The fixture remains out of service, pending further assessment and remedial action.

School Action

As of the date of this report, the school may discontinue daily flushing protocols with respect to the faucets that tested below action levels and remain in service.

Southeast Middle

All 43 faucets used for drinking or food preparation at Southeast Middle were tested on December 18, 2018 and results were received on January 2, 2019.

Of those tested, 39 faucets had lead levels lower than the test is able to detect, and all had lead levels below 10 ppb.

Results from all faucets tested were below the EPA action level for copper.

School Action

As of the date of this report, the school may discontinue daily flushing protocols.

Morehead Elementary

All 28 faucets used for drinking or food preparation at Morehead Elementary were tested on December 19, 2018 and results were received on January 2, 2019.

Of those tested, 26 faucets had lead levels lower than the test is able to detect, and all had lead levels below 10 ppb.

Results from all faucets tested were below the EPA action level for copper.

School Action

As of the date of this report, the school may discontinue daily flushing protocols.

Claxton Elementary

All 33 faucets used for drinking or food preparation at Claxton Elementary were tested on December 18, 2018 and results were received on January 2, 2019.

Of those tested, 28 faucets had lead levels lower than the test is able to detect, and all had lead levels below 10 ppb.

Results from all faucets tested were below the EPA action level for copper.

School Action

As of the date of this report, the school may discontinue daily flushing protocols.

Falkener Elementary

All 34 faucets used for drinking or food preparation at Falkener Elementary were tested on December 21, 2018 and results were received on January 4, 2019.

Of those tested, 32 faucets had lead levels lower than the test is able to detect, and all had lead levels below 10 ppb.

Results from all faucets tested were below the EPA action level for copper.

School Action

As of the date of this report, the school may discontinue daily flushing protocols.

Kirkman Park Elementary

All 36 faucets used for drinking or food preparation at Kirkman Park Elementary were tested on December 21, 2018 and results were received on January 4, 2019.

Of those tested, 18 faucets had lead levels lower than the test is able to detect, and all had lead levels below 10 ppb.

Results from all faucets tested were below the EPA action level for copper.

School Action

As of the date of this report, the school may discontinue daily flushing protocols.

Swann Middle

All 32 faucets used for drinking or food preparation at Swann Middle were tested on December 20, 2018 and results were received on January 9, 2019.

Of those tested, 22 faucets had lead levels lower than the test is able to detect, and all had lead levels below 10 ppb.

Results from all faucets tested were below the EPA action level for copper.

School Action

As of the date of this report, the school may discontinue daily flushing protocols.

[Phase 2 Water Quality Initiative - Interim Report Addendum](#)