

October 18, 2021

Beatriz M. Figueroa
Director, Real Estate and Facilities
Uncommon Schools

For distribution

RE: **Lead in Drinking Water Sampling**
North Star Academy – Alexander Street Elementary
43 Alexander Street
Newark, NJ 07106
EL Project # 21-0010

To Whom it May Concern:

North Star Academy Schools are committed to protecting student, teacher, and staff health. To protect the North Star community and be in compliance with the Department of Education regulations, North Star Academy retained Environmental Logic, LLC (EL) to test the school's drinking water for lead.

Results of our Testing

Following instructions given in technical guidance developed by the New Jersey Department of Environmental Protection, a plumbing profile for each of the buildings within the North Star Academy system was prepared. Through this effort, we identified and tested all drinking water and food preparation outlets. The US Environmental Protection Agency has established a lead in drinking water action level of 15 µg/l [ppb]. On July 16, 2021, EL collected drinking water samples throughout the aforementioned school.

No lead concentrations exceeding 15 µg/l [ppb] were identified in drinking water outlets or food preparation sinks.

Additionally, EL collected samples from water sources that are not designed for drinking following prior lead in drinking water monitoring events.

The table below identifies water outlets that tested above the 15 µg/l for lead. All of these faucets are designed for handwashing/building systems purposes and, while the identified concentrations do not *require* remedial action, EL recommends that "DO NOT DRINK – SAFE FOR HANDWASHING ONLY" signage be added to these locations as a precautionary measure.



| Sample Location | Sample ID | Purpose | First Draw Result in µg/l (ppb) | Recommended Action |
|---|-------------------|-------------|---------------------------------|------------------------------|
| Nurse's office Handwashing Sink | AS-NS-1FL-E1-UN35 | Handwashing | 19.6 | Add handwashing only signage |
| 1 st Floor Bathroom Sink | AS-BF-1FL-E1-UN37 | Handwashing | 516 | Add handwashing only signage |
| 1 st Floor Bathroom Sink | AS-BF-1FL-S3-UN46 | Handwashing | 55.4 | Add handwashing only signage |
| 1 st Floor Teacher's Prep Room | AS-EC-1FL-N5-106 | Handwashing | 84.2 | Add handwashing only signage |
| 1 st Floor Teacher's Prep Room | AS-EC-1FL-WC-106 | Handwashing | 30.1 | Add handwashing only signage |
| 1 st Floor Teacher's Prep Room | AS-EC-1FL-N4-106 | Handwashing | 145 | Add handwashing only signage |
| 1 st Floor Teacher's Prep Room | AS-EC-1FL-N3-106 | Handwashing | 105 | Add handwashing only signage |
| 1 st Floor Teacher's Prep Room | AS-EC-1FL-N2-106 | Handwashing | 297 | Add handwashing only signage |
| 1 st Floor Teacher's Prep Room | AS-EC-1FL-N1-106 | Handwashing | 264 | Add handwashing only signage |
| 3 rd Floor Bathroom Sink | AS-BF-3FL-S2-UN76 | Handwashing | 38.4 | Add handwashing only signage |

Health Effects of Lead

High levels of lead in drinking water can cause health problems. Lead is most dangerous for pregnant women, infants, and children under 6 years of age. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. Exposure to high levels of lead during pregnancy contributes to low birth weight and developmental delays in infants. In young children, lead exposure can lower IQ levels, affect hearing, reduce attention span, and hurt school performance. At very high levels, lead can even cause brain damage. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

How Lead Enters our Water

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like groundwater, rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and in building plumbing. These materials include lead-based solder used to join copper pipe, brass, and chrome-plated brass faucets. In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials. However, even the lead in plumbing materials meeting these new requirements is subject to corrosion. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into the drinking water. This means the first water drawn from the tap in the morning *may* contain fairly high levels of lead.



Lead in Drinking Water

Lead in drinking water, although rarely the sole cause of lead poisoning can significantly increase a person's total lead exposure, particularly the exposure of children under the age of 6. EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead.

For More Information

A copy of the test results is available at the Downtown Middle School central office for inspection by the public, including students, teachers, other school personnel, and parents. The results are also available on the North Star Academy website at <https://northstar.uncommonschoools.org/lead-results/>. For more information about water quality in the North Star Academy schools, contact Beatriz Figueroa, Director, Real Estate and Facilities at Beatriz.Figueroa@uncommonschoools.org.

For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at www.epa.gov/lead, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

If you are concerned about lead exposure at this facility or in your home, you may want to ask your health care providers about testing children to determine levels of lead in their blood.

Sincerely,



Michael B. Adams
Senior Project Manager

Enclosures: Full Analytical Data Table

SGS Dayton, NJ

| | |
|-----------------|------------------------------|
| Job Number: | JD28574 |
| Account: | Environmental Logic LLC. |
| Project: | Uncommon Schools, Newark, NJ |
| Project Number: | 21-0010 |
| Address: | 43 Alexander Street |

Legend: Exceed

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|-------------------|--|--|------------------|------------------|-------------------|-------------------|
| Client Sample ID: | | NJ Drinking Water Standards (NJAC 7:10 9/18) | AS-KC-GFL-E1-UN6 | AS-KC-GFL-E2-UN6 | AS-HS-1FL-N1-UN43 | AS-NS-1FL-E1-UN35 |
| Lab Sample ID: | | | JD28574-1 | JD28574-2 | JD28574-3 | JD28574-4 |
| Date Sampled: | | | 7/16/2021 | 7/16/2021 | 7/16/2021 | 7/16/2021 |
| Matrix: | | | Drinking Water | Drinking Water | Drinking Water | Drinking Water |

Metals Analysis

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|------|------|----|------|------|------|------|
| Lead | ug/l | 15 | 2.02 | 5.59 | 8.15 | 19.6 |
|------|------|----|------|------|------|------|

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|-------------------|--|--|-------------------|-------------------|-------------------|-------------------|
| Client Sample ID: | | NJ Drinking Water Standards (NJAC 7:10 9/18) | AS-BF-1FL-E1-UN37 | AS-BF-1FL-S1-UN47 | AS-BF-1FL-S2-UN47 | AS-BF-1FL-S3-UN47 |
| Lab Sample ID: | | | JD28574-5 | JD28574-6 | JD28574-7 | JD28574-8 |
| Date Sampled: | | | 7/16/2021 | 7/16/2021 | 7/16/2021 | 7/16/2021 |
| Matrix: | | | Drinking Water | Drinking Water | Drinking Water | Drinking Water |

Metals Analysis

| | | | | | | |
|------|------|----|-----|------|------|-----|
| Lead | ug/l | 15 | 516 | 8.18 | 5.37 | 6.5 |
|------|------|----|-----|------|------|-----|

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|-------------------|--|--|-------------------|-------------------|-------------------|-------------------|
| Client Sample ID: | | NJ Drinking Water Standards (NJAC 7:10 9/18) | AS-BF-1FL-S4-UN47 | AS-BF-1FL-S5-UN47 | AS-BF-1FL-S1-UN46 | AS-BF-1FL-S2-UN46 |
| Lab Sample ID: | | | JD28574-9 | JD28574-10 | JD28574-11 | JD28574-12 |
| Date Sampled: | | | 7/16/2021 | 7/16/2021 | 7/16/2021 | 7/16/2021 |
| Matrix: | | | Drinking Water | Drinking Water | Drinking Water | Drinking Water |

Metals Analysis

| | | | | | | |
|------|------|----|------|------|------|------|
| Lead | ug/l | 15 | 8.32 | 12.5 | 1.24 | 1.27 |
|------|------|----|------|------|------|------|

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|-------------------|--|--|-------------------|-------------------|-------------------|-------------------|
| Client Sample ID: | | NJ Drinking Water Standards (NJAC 7:10 9/18) | AS-BF-1FL-S3-UN46 | AS-BF-1FL-S4-UN46 | AS-BF-1FL-S5-UN46 | AS-WC-1FL-E1-UN46 |
| Lab Sample ID: | | | JD28574-13 | JD28574-14 | JD28574-15 | JD28574-16 |
| Date Sampled: | | | 7/16/2021 | 7/16/2021 | 7/16/2021 | 7/16/2021 |
| Matrix: | | | Drinking Water | Drinking Water | Drinking Water | Drinking Water |

Metals Analysis

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|------|------|----|------|------|------|-------|
| Lead | ug/l | 15 | 55.4 | 4.36 | 3.53 | <0.50 |
|------|------|----|------|------|------|-------|

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|-------------------|--|--|------------------|------------------|------------------|------------------|
| Client Sample ID: | | NJ Drinking Water Standards (NJAC 7:10 9/18) | AS-EC-1FL-N5-106 | AS-EC-1FL-WC-106 | AS-EC-1FL-N4-106 | AS-EC-1FL-N3-106 |
| Lab Sample ID: | | | JD28574-17 | JD28574-18 | JD28574-19 | JD28574-20 |
| Date Sampled: | | | 7/16/2021 | 7/16/2021 | 7/16/2021 | 7/16/2021 |
| Matrix: | | | Drinking Water | Drinking Water | Drinking Water | Drinking Water |

Metals Analysis

| | | | | | | |
|------|------|----|------|------|-----|-----|
| Lead | ug/l | 15 | 84.2 | 30.1 | 145 | 105 |
|------|------|----|------|------|-----|-----|

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|-------------------|--|--|------------------|------------------|------------------|------------------|
| Client Sample ID: | | NJ Drinking Water Standards (NJAC 7:10 9/18) | AS-EC-1FL-N2-106 | AS-EC-1FL-N1-106 | AS-HS-1FL-S1-109 | AS-WC-1FL-E1-109 |
| Lab Sample ID: | | | JD28574-21 | JD28574-22 | JD28574-23 | JD28574-24 |
| Date Sampled: | | | 7/16/2021 | 7/16/2021 | 7/16/2021 | 7/16/2021 |
| Matrix: | | | Drinking Water | Drinking Water | Drinking Water | Drinking Water |

Metals Analysis

| | | | | | | |
|------|------|----|-----|-----|------|-------|
| Lead | ug/l | 15 | 297 | 264 | 3.13 | <0.50 |
|------|------|----|-----|-----|------|-------|

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|---|------|--|-------------------|-------------------|-------------------|-------------------|
| Client Sample ID: | | NJ Drinking Water Standards (NJAC 7:10 9/18) | AS-CWL-1FL-E1-109 | AS-BF-2FL-S1-UN54 | AS-BF-2FL-S2-UN54 | AS-BF-2FL-S3-UN54 |
| Lab Sample ID: | | | JD28574-25 | JD28574-26 | JD28574-27 | JD28574-28 |
| Date Sampled: | | | 7/16/2021 | 7/16/2021 | 7/16/2021 | 7/16/2021 |
| Matrix: | | | Drinking Water | Drinking Water | Drinking Water | Drinking Water |
| Metals Analysis | | | | | | |
| Lead | ug/l | 15 | <0.50 | 6.47 | 1.32 | 4.89 |
| Client Sample ID: | | NJ Drinking Water Standards (NJAC 7:10 9/18) | AS-BF-2FL-S4-UN54 | AS-BF-2FL-S5-UN54 | AS-WC-2FL-E1 | AS-BF-2FL-S1-UN57 |
| Lab Sample ID: | | | JD28574-29 | JD28574-30 | JD28574-31 | JD28574-32 |
| Date Sampled: | | | 7/16/2021 | 7/16/2021 | 7/16/2021 | 7/16/2021 |
| Matrix: | | | Drinking Water | Drinking Water | Drinking Water | Drinking Water |
| Metals Analysis | | | | | | |
| Lead | ug/l | 15 | 3.75 | 8.37 | <0.50 | 8.46 |
| Client Sample ID: | | NJ Drinking Water Standards (NJAC 7:10 9/18) | AS-BF-2FL-S2-UN57 | AS-BF-2FL-S3-UN57 | AS-BF-2FL-S4-UN57 | AS-BF-2FL-S5-UN57 |
| Lab Sample ID: | | | JD28574-33 | JD28574-34 | JD28574-35 | JD28574-36 |
| Date Sampled: | | | 7/16/2021 | 7/16/2021 | 7/16/2021 | 7/16/2021 |
| Matrix: | | | Drinking Water | Drinking Water | Drinking Water | Drinking Water |
| Metals Analysis | | | | | | |
| Lead | ug/l | 15 | 5.08 | 3.09 | 8.82 | 13.6 |
| Client Sample ID: | | NJ Drinking Water Standards (NJAC 7:10 9/18) | AS-WC-3FL-E1 | AS-BF-3FL-S1-UN76 | AS-BF-3FL-S2-UN76 | AS-HS-3FL-S1-309 |
| Lab Sample ID: | | | JD28574-37 | JD28574-38 | JD28574-39 | JD28574-40 |
| Date Sampled: | | | 7/16/2021 | 7/16/2021 | 7/16/2021 | 7/16/2021 |
| Matrix: | | | Drinking Water | Drinking Water | Drinking Water | Drinking Water |
| Metals Analysis | | | | | | |
| Lead | ug/l | 15 | <0.50 | 11.9 | 38.4 | 2.01 |
| <p>Regulatory limits listed in this document have been obtained from the latest version of the regulations cited and are used for advisory purposes only. SGS assumes no responsibility for errors in regulatory documents or changes to criteria detailed in later versions of the referenced regulation. It is the responsibility of the user to verify these limits before using or reporting any data.</p> <p>10 results exceeded regulatory criteria.</p> | | | | | | |