



Friday, June 15, 2018

Will County School District 92
708 North State Street
Lockport, IL 60441

Attention: Ms. Teresa Bishop, Assistant Superintendent for Business Services/CSBO

Subject: Lead Drinking Water Data Review Walsh, Reed, Ludwig and Oak Prairie

Will County District 92 –

Overview: On May 22, Elemental Solutions pulled water samples from the following Schools – Reed, Ludwig, Oak Prairie and Walsh. Fixtures that were sampled were based on previous positive results from analysis performed on April 2017 and September 2017

School: Reed

Total Number of Fixtures Sampled: 4

Total Number of Positive Results: 3

Summary: The one of the three fixtures was the sink in the Nurses office. The result was 2.08 ppb. This is a new fixture and one option is filtration. The two other positives were in the Kitchen and on the first draws. May need to look at the age of these fixtures.

School: Ludwig

Total Number of Fixtures Sampled: 7

Total Number of Positive Results: 5

Summary: The drinking fountain outside Room 9/12 was very high (760 ppb – 1st draw & 113 ppb 2nd draw). This should be addressed with a new fountain with filtration. The drinking fountain outside the Music room was positive (6.75 ppb – 1st draw & 6.13 ppb 2nd draw). This should be addressed with a new fountain with filtration. The Teachers Lounge had a positive just over the detection limit at 2.08 ppb. If the fixture is new, you may need to look at filtration. Of the three fixtures sampled in the Kitchen, it was the first draw at Sink 1 (2.08 ppb) and the final draw at Sink 3 (5.04 ppb) that had positive results. It should be noted that Sink 3 is a hand washing sink.



School: Oak Prairie

Total Number of Fixtures Sampled: 14

Total Number of Positive Results: 9

Summary: The two fixtures in the Nurses office had positive first draw samples, second draws were below 2.00 ppb. Investigate the age of the fixtures and either look to replace or filter. The first draw in the Teachers Lounge was positive (6.30 ppb), with the second draw below 2 ppb. One thing to note is that the Teachers Lounge fixture was turned off underneath. We turned it on and it may have impacted the result. Of the seven fixtures that were sampled, only one was not positive (Sink 3). Sinks 6 and 7 had positive results on the first and second draws. Sink 6 is a hand washing sink and Sink 7 had a water mixing valve (warm water) and is used to rinse plates into the garbage disposal.

School: Walsh

Total Number of Fixtures Sampled: 37

Total Number of Positive Results: 21

Summary: The three sinks in the Art room all had positive first and second draws. This is a very old fixture and should look to be replaced. The drinking fountain outside of Room 1A had positive results for the first and second draws. We recommend to replace fixture with new one that has filtration. The sinks in Rooms 1A and 1B had positives on both draws. Filtration may be a better option.

Of the fourteen (14) classrooms we sampled the sink / drinking fountain fixtures the following classrooms didn't have any positives:

- Room #1
- Room #5
- Room #7
- Room #11

The remaining sinks in Rooms – 2, 3, 4, 6, 8, 9, 10 and 12 all had a single positive draw. The common thing they all had was the positive was on the first draw taken in that classroom. The remaining three (3) draws were all under 2 ppb. The only exception was Room 14 which all four draws were positive.

It is recommended to review the plumbing and water flow through these classrooms to help determine possible mitigation strategies.

All five (5) fixtures in the Kitchen had positives on both draws, except for Sink 4. Need to look at the age of the fixture and how these sinks are used before recommending solutions.



DRINKING WATER ANALYSIS REPORT

Elemental Solutions, LLC

P.O. Box 59203, Schaumburg, IL 60173

www.elementalsolutionsllc.com

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|--|------------------|
| Prepared For: | Will County D92 |
| Report Attention To: | Gary Moser |
| Sample Collection Date(s): | 5/22/2018 |
| Sample Collection Volume: | 250mL |
| Date & Time of Last System Use: | 5/21/2018 6:45pm |

| | |
|-------------------------------|-----------------------|
| Analysis Parameter: | |
| Lead by EPA 200.8; MRL = 1ppb | |
| Analysis Date(s): | 5/31/18,6/1/18,6/5/18 |
| Laboratory: | PDC Labs |
| School: | Reed |

| Sampling Location | Sample ID | Result (µg/L) | Comments |
|-------------------|------------|---------------|------------------------|
| RS - Nurse | 8054570-01 | 2.08 | above the action limit |
| RS - Nurse 2D | 8054570-02 | <2.00 | under the action limit |
| RS - kitchen 1 | 8054570-03 | 5.86 | above the action limit |
| RS - kitchen 1 2D | 8054570-04 | <2.00 | under the action limit |
| RS - kitchen 2 | 8054570-05 | 4.13 | above the action limit |
| RS - kitchen 2 2D | 8054570-06 | <2.00 | under the action limit |
| RS - kitchen 3 | 8054570-07 | <2.00 | under the action limit |
| RS - kitchen 3 2D | 8054570-08 | <2.00 | under the action limit |



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| Lead by EPA 200.8; MRL = 1ppb | |
| Analysis Date(s): | 5/31/18,6/1/18,6/5/18 |
| Laboratory: | PDC Labs |
| School: | Lugwig |

| Sampling Location | Sample ID | Result (µg/L) | Comments |
|-------------------------|------------|---------------|------------------------|
| LE KITCHEN S1 | 8054570-AL | 2.08 | above the action limit |
| LE KITCHEN S1 2D | 8054570-AM | <2.00 | under the action limit |
| LE KITCHEN S2 | 8054570-AN | <2.00 | under the action limit |
| LE KITCHEN S2 2D | 8054570-AO | <2.00 | under the action limit |
| LE KITCHEN S3 | 8054570-AP | <2.00 | under the action limit |
| LE KITCHEN S3 2D | 8054570-AQ | 5.04 | above the action limit |
| LE TEACHERS | 8054570-AR | 2.08 | above the action limit |
| LE TEACHERS 2D | 8054570-AS | <2.00 | under the action limit |
| LE DF OUTSIDE RM9/12 | 8054570-AT | 760 | above the action limit |
| LE DF OUTSIDE RM9/12 2D | 8054570-AU | 113 | above the action limit |
| LE DF OUTSIDE RM7 | 8054570-AV | <2.00 | under the action limit |
| LE DF OUTSIDE RM7 2D | 8054570-AW | <2.00 | under the action limit |
| LE DF OUTSIDE MUSIC | 8054570-AX | 6.75 | above the action limit |
| LE DF OUTSIDE MUSIC 2D | 8054570-AY | 6.13 | above the action limit |



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| Laboratory: | PDC Labs |
| School: | Oak Prairie |

| Sampling Location | Sample ID | Result (µg/L) | Comments |
|-------------------------|------------|---------------|------------------------|
| OP - Nurse Office | 8054570-09 | 4.78 | above the action limit |
| OP - Nurse Office 2D | 8054570-10 | <2.00 | under the action limit |
| OP - Nurse Bath | 8054570-11 | 3.10 | above the action limit |
| OP - Nurse Bath 2D | 8054570-12 | <2.00 | under the action limit |
| OP - Teachers Lounge | 8054570-13 | 6.30 | above the action limit |
| OP - Teachers Lounge 2D | 8054570-14 | <2.00 | under the action limit |
| OP - Kitchen 1 | 8054570-15 | 4.62 | above the action limit |
| OP - Kitchen 1 2D | 8054570-16 | <2.00 | under the action limit |
| OP - Kitchen 2 | 8054570-17 | 9.37 | above the action limit |
| OP - Kitchen 2 2D | 8054570-18 | <2.00 | under the action limit |
| OP - Kitchen 3 | 8054570-19 | <2.00 | under the action limit |
| OP - Kitchen 3 2D | 8054570-20 | <2.00 | under the action limit |
| OP - Kitchen 4 | 8054570-21 | 6.65 | above the action limit |
| OP - Kitchen 4 2D | 8054570-22 | <2.00 | under the action limit |
| OP - Kitchen 5 | 8054570-23 | 4.30 | above the action limit |
| OP - Kitchen 5 2D | 8054570-24 | <2.00 | under the action limit |
| OP - Kitchen 6 | 8054570-25 | 10.1 | above the action limit |
| OP - Kitchen 6 2D | 8054570-26 | 2.57 | above the action limit |
| OP - Kitchen 7 | 8054570-27 | 4.69 | above the action limit |
| OP - Kitchen 7 2D | 8054570-28 | 3.68 | above the action limit |
| OP - RM 13 DF1 | 8054570-29 | <2.00 | under the action limit |
| OP - RM 13 DF1 2D | 8054570-30 | <2.00 | under the action limit |
| OP - RM 13 DF 2 | 8054570-31 | <2.00 | under the action limit |
| OP - RM 13 DF 2 2D | 8054570-32 | <2.00 | under the action limit |
| OP - RM 6 DF1 | 8054570-33 | <2.00 | under the action limit |
| OP - RM 6 DF1 2D | 8054570-34 | <2.00 | under the action limit |
| OP - RM 6 DF2 | 8054570-35 | <2.00 | under the action limit |
| OP - RM 6 DF2 2D | 8054570-36 | <2.00 | under the action limit |



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| Analysis Date(s): | 5/31/18,6/1/18,6/5/18 |
| Laboratory: | PDC Labs |
| School: | Walsh |

| Sampling Location | Sample ID | Result (µg/L) | Comments |
|------------------------|------------|---------------|------------------------|
| WE ART S1 | 8054570-37 | 10.9 | above the action limit |
| WE ART S1 2D | 8054570-38 | 2.31 | above the action limit |
| WE ART S2 | 8054570-39 | 6.31 | above the action limit |
| WE ART S2 2D | 8054570-40 | 3.32 | above the action limit |
| WE ART S3 | 8054570-41 | 4.68 | above the action limit |
| WE ART S3 2D | 8054570-42 | 2.37 | above the action limit |
| WE DF Outside Rm 1A | 8054570-43 | 2.52 | above the action limit |
| WE DF Outside Rm 1A 2D | 8054570-44 | 5.08 | above the action limit |
| WE Rm 1A | 8054570-45 | 11.7 | above the action limit |
| WE Rm 1A 2D | 8054570-46 | 2.69 | above the action limit |
| WE Rm 1B | 8054570-47 | 8.40 | above the action limit |
| WE Rm 1B 2D | 8054570-48 | 4.37 | above the action limit |
| WE Rm1 S1 | 8054570-49 | <2.00 | under the action limit |
| WE Rm1 S1 2D | 8054570-50 | <2.00 | under the action limit |
| WE Rm1 DF2 | 8054570-51 | <2.00 | under the action limit |
| WE Rm1 DF2 2D | 8054570-52 | <2.00 | under the action limit |
| WE Rm2 DF1 | 8054570-53 | 3.50 | above the action limit |
| WE Rm2 DF1 2D | 8054570-54 | <2.00 | under the action limit |
| WE Rm2 S2 | 8054570-55 | <2.00 | under the action limit |
| WE Rm2 S2 2D | 8054570-56 | <2.00 | under the action limit |
| WE RM3 S1 | 8054570-57 | 4.28 | above the action limit |
| WE RM3 S1 2D | 8054570-58 | <2.00 | under the action limit |
| WE RM3 DF2 | 8054570-59 | <2.00 | under the action limit |
| WE RM3 DF2 2D | 8054570-60 | <2.00 | under the action limit |
| WE RM4 DF1 | 8054570-61 | 8.29 | above the action limit |
| WE RM4 DF1 2D | 8054570-62 | <2.00 | under the action limit |
| WE RM4 S2 | 8054570-63 | <2.00 | under the action limit |
| WE RM4 S2 2D | 8054570-64 | <2.00 | under the action limit |
| WE RM5 S1 | 8054570-65 | <2.00 | under the action limit |
| WE RM5 S1 2D | 8054570-66 | <2.00 | under the action limit |
| WE RM5 DF2 | 8054570-67 | <2.00 | under the action limit |
| WE RM5 DF2 2D | 8054570-68 | <2.00 | under the action limit |
| WE RM6 DF1 | 8054570-69 | 4.66 | above the action limit |
| WE RM6 DF1 2D | 8054570-70 | <2.00 | under the action limit |
| WE RM6 S2 | 8054570-71 | <2.00 | under the action limit |
| WE RM6 S2 2D | 8054570-72 | <2.00 | under the action limit |



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| WE RM7 S1 | 8054570-73 | <2.00 | under the action limit |
| WE RM7 S1 2D | 8054570-74 | <2.00 | under the action limit |
| WE RM7 DF2 | 8054570-75 | <2.00 | under the action limit |
| WE RM7 DF2 2D | 8054570-76 | <2.00 | under the action limit |
| WE RM8 DF1 | 8054570-77 | 3.99 | above the action limit |
| WE RM8 DF1 2D | 8054570-78 | <2.00 | under the action limit |
| WE RM8 S2 | 8054570-79 | <2.00 | under the action limit |
| WE RM8 S2 2D | 8054570-80 | <2.00 | under the action limit |
| WE RM9 S1 | 8054570-81 | 2.70 | above the action limit |
| WE RM9 S1 2D | 8054570-82 | <2.00 | under the action limit |
| WE RM9 DF2 | 8054570-83 | <2.00 | under the action limit |
| WE RM9 DF2 2D | 8054570-84 | <2.00 | under the action limit |
| WE RM10 DF1 | 8054570-85 | 4.00 | above the action limit |
| WE RM10 DF1 2D | 8054570-86 | <2.00 | under the action limit |
| WE RM10 S2 | 8054570-87 | <2.00 | under the action limit |
| WE RM10 S2 2D | 8054570-88 | <2.00 | under the action limit |
| WE RM11 S1 | 8054570-89 | <2.00 | under the action limit |
| WE RM11 S1 2D | 8054570-90 | <2.00 | under the action limit |
| WE RM11 DF2 | 8054570-91 | <2.00 | under the action limit |
| WE RM11 DF2 2D | 8054570-92 | <2.00 | under the action limit |
| WE RM12 DF1 | 8054570-93 | 4.72 | above the action limit |
| WE RM12 DF1 2D | 8054570-94 | <2.00 | under the action limit |
| WE RM12 S2 | 8054570-95 | <2.00 | under the action limit |
| WE RM12 S2 2D | 8054570-96 | <2.00 | under the action limit |
| WE RM14 S2 | 8054570-97 | 4.49 | above the action limit |
| WE RM14 S2 2D | 8054570-98 | 2.19 | above the action limit |
| WE RM14 DF1 | 8054570-99 | 9.21 | above the action limit |
| WE RM14 DF1 2D | 8054570-AA | 2.92 | above the action limit |
| WE KITCHEN 1 | 8054570-AB | 34.4 | above the action limit |
| WE KITCHEN 1 2D | 8054570-AC | 13.3 | above the action limit |
| WE KITCHEN 2 | 8054570-AD | 24.0 | above the action limit |
| WE KITCHEN 2 2D | 8054570-AE | 6.39 | above the action limit |
| WE KITCHEN 3 | 8054570-AF | 30.0 | above the action limit |
| WE KITCHEN 3 2D | 8054570-AG | 5.40 | above the action limit |
| WE KITCHEN 4 | 8054570-AH | 5.08 | above the action limit |
| WE KITCHEN 4 2D | 8054570-AI | <2.00 | under the action limit |



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| Sampling Location | Sample ID | Result (µg/L) | Comments |
|-------------------|------------|---------------|------------------------|
| WE KITCHEN 5 | 8054570-AJ | 24.3 | above the action limit |
| WE KITCHEN 5 2D | 8054570-AK | 3.22 | above the action limit |