



August 15, 2018

Mathew Sam
Detroit Public Schools
1601 Farnsworth
Detroit, Michigan 48202

SUBMITTED VIA EMAIL TO: mathew.sam@detroitk12.org

**SUBJECT:** Drinking Water Screening Report

**Foreign Language Immersion (FLICS)** 

6501 West Outer Circle Detroit, Michigan

Dear Mr. Sam:

ATC Group Services, LLC (ATC) is pleased to submit this Drinking Water Screening Report for the subject school. The drinking water samples collected from the school were submitted to Pace Analytical Services, LLC, for Michigan Department of Environmental Quality (MDEQ) Drinking Water Certified lead and copper analysis.

# **SCOPE OF WORK**

At the request of the Detroit Public Schools (DPS), ATC collected drinking water samples as a general screening for copper and lead at the subject school. The water sampling conducted included the sampling of fixtures within teacher's lounges, kitchens, water fountains and pre-k classrooms. One (1) sample was collected at each outlet: a first draw (Primary) sample. The Primary samples were collected from outlets that had been inactive for a minimum of eight to eighteen hours. The fixture inventory locations including the sample locations are shown on the Fixture Inventory Locations Map included under Attachment A and fixture inventory photos including the sample location photos are included in a Fixture Inventory Photo Log under Attachment B.

The drinking water samples were collected in 125 milliliter, wide-mouth sample containers, containing nitric acid (preservative). Each sample container was labeled utilizing a unique coding system that identified: the type of drinking outlet sampled as well as the location.



The samples were transported under chain of custody to Pace Analytical Services, LLC, located at 5560 Corporate Exchange Ct. SE Grand Rapids, MI for MDEQ drinking water certified lead and copper analysis, using analytical method EPA 200.8 rev 5.4.

# **FINDINGS**

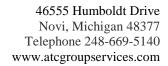
Analytical results indicate that two (2) of the samples analyzed was above the EPA recommended limits of 15 micrograms per liter (ug/L) for lead. The table below summarizes the analytical results for the samples submitted. The laboratory analytical reports and chain of custody are provided in Attachment C.

Table 1 – Water Testing Results (August 3, 2018)

Sample Number	Location	Description	Total Lead (ug/I)	Total Copper (ug/l)
3-HW-B-2	3 <sup>rd</sup> Floor between Rm 314 &313	Left bubbler	1.6 ug/L	140 ug/L
3-HW-B-3	3 <sup>rd</sup> Floor between Rm 314 &313	Right bubbler	2.2 ug/L	180 ug/L
2-HW-B-4	2 <sup>nd</sup> Floor between Rm 214 & 213	Left Bubbler	<1.0 ug/L	37.5 ug/L
2-HW-B-5	2 <sup>nd</sup> Floor between Rm 214 & 213	Right Bubbler	<1.0 ug/L	44.1 ug/L
1-HW-B-6	1 <sup>st</sup> Floor between Rm 129 & 130	Left Bubbler	1.4 ug/L	135 ug/L
1-HW-B-7	1 <sup>st</sup> Floor between Rm 129 & 130	Right Bubbler	1.7 ug/L	77.4 ug/L
1-120-B-8	In gym	Left Bubbler	7.6 ug/L	372 ug/L
1-120-B-9	In Gym	Right bubbler	15.1 ug/L	372 ug/L



Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-159-CF/B-10	Kindergarten class	Classroom faucet w/ bubbler	<1.0 ug/L	488 ug/L
1-158-CF/B-11	Kindergarten Class	Classroom faucet w/ bubbler	<1.0 ug/L	535 ug/L
1-157-CF/B-12	Kindergarten Class	Classroom faucet w/ bubbler	<1.0 ug/L	425 ug/L
1-HW-DWF-13	Across from room 161	Drinking water fountain	<1.0 ug/L	351 ug/L
1-156-CF/B-14	Kindergarten class	Classroom faucet w/ bubbler	<1.0 ug/L	613 ug/L
1-HW-DWF-15	1 <sup>st</sup> Floor by main door	Left Drinking water fountain	<1.0 ug/L	163 ug/L
1-HW-DWF-16	1 <sup>st</sup> Floor by main door	Right drinking water fountain	<1.0 ug/L	18.4 ug/L
1-142-KS-17	Cafeteria next to kitchen (149)	Hand wash faucet	2.2 ug/L	246 ug/L
1-149-KS-18	Kitchen 1 <sup>st</sup> on left	Kitchen sink faucet	<1.0 ug/L	164 ug/L
1-149-KS-19	In kitchen on left	Hand wash faucet	5.4 ug/L	257 ug/L
1-149-KS-20	In kitchen at dish washing station	Left kitchen sink faucet	4.5 ug/L	321 ug/L
1-149-KS-21	In kitchen at dish washing station	Middle kitchen faucet	4.1 ug/L	251 ug/L





Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-149-KS-23	In kitchen across from dishwashing station	Hand wash faucet	67.8 ug/L	535 ug/L
B-HW-B-24	Basement next to boys restroom (204)	Left Bubbler	1.8 ug/L	86.5 ug/L
B-HW-B-25	Basement next to boys restroom	Right Bubbler	1.6 ug/L	154 ug/L

Key: NA - Not Analyzed

ug/L- micrograms per liter /parts per billion (ppb)

Analyses of samples in the gym and in the kitchen indicate that lead levels were above the MCL. See recommendations below.

### **RECOMMENDATIONS**

For drinking water fixtures that exceed the MCL after the initial sampling, ATC recommends the following:

- 1. Implement a plan in accordance with MDEQ Guidance on Drinking Water Sampling for Lead and Copper, April, 2016 Version2; OR
- 2. Remove fixture from service.
- 3. Implement a flush plan for fixtures that exceed the MCL of the initial sample according to MDEQ Guidance and the EPA's 3T's for Reducing Lead in Drinking Water in Schools.

#### **LIMITATIONS**

The sampling and analysis completed was: a preliminary screening for lead and copper only, to assess lead and copper concentrations (ug/L) at drinking water outlets in the school designated as high use by DPS, and may not be representative of all drinking water outlets within the school. If lead or copper concentrations were identified above their respective MCL's at any of the drinking water outlets tested, further review of the plumping system, fixtures affected, and



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testing may be completed to assess the source of the elevated levels of lead and/or copper, as well as, any other response actions deemed necessary by DPS.

Future drinking water evaluation and sampling in accordance with the recommendations may be predicated on applicable guidelines by the MDEQ or EPA and will be determined prior to developing a sampling plan for the school.

Sincerely,

**ATC Group Services, LLC** 

Marta & Somble

Martin K. Gamble

Senior Project Manager

Robert C. Smith

**Building Science Department Manager** 

Robert C. Luiz

# **Attachments**

Attachment A: Fixture Inventory Locations Map/Form

Attachment B: Fixture Inventory Photo Log Attachment C: Laboratory Analytical Report