



August 16, 2018

Mathew Sam
Detroit Public Schools
1601 Farnsworth
Detroit, Michigan 48202

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

SUBJECT: Drinking Water Screening Report

Sampson Webber 4700 Tireman Street 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 14 of the samples analyzed were above the EPA recommended limits of 15 micrograms per liter (ug/L) for lead. None of the samples analyzed were above the EPA recommended limits of 1300 micrograms per liter (ug/L) for copper. 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 13, 2018)

Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-D-SRF-1	D-wing first room on the right	KF (dish washing)	5.2 ug/L	234 ug/L
1-D-DWF-3	D-wing hallway, across from room D115, between men &women restrooms	DWF	2.2 ug/L	448 ug/L
1-HW-B-4	across from food service, between men & women restrooms	DWF	19.5 ug/L	167 ug/L
1-103-FSF-5	first sink on the right located in the room 103	KF (dish washing)	626 ug/L	345 ug/L
1-103-FSF-6	located on the left of #5	KF (dish washing)	2.9 ug/L	139 ug/L
1-103-FSF-8	located next to #7	KF (dish washing)	<1.0 ug/L	99.6 ug/L
1-C105-FPF-12	located on the left #11 @ sanitizing station	KF (dish washing)	6.7 ug/L	223 ug/L
1-C105-FPF-13	located on the left #12 @ sanitizing station	KF (dish washing)	16.3 ug/L	392 ug/L



Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-C107-FPF-16	located @ sandwich prep. Station	KF (dish washing)	37.9 ug/L	157 ug/L
1-C107-FPF-17	On the left by the door	Bubbler	45.9 ug/L	179 ug/L
1-C107-FPF-20	located on the right to #19	KF (dish washing)	7.0 ug/L	145 ug/L
1-C107-FPF-21	located on the right to #20	KF (dish washing)	6.6 ug/L	186 ug/L
1-C107-FPF-22	on the right side @ Salad Prep. Station	KF (dish washing)	4.5 ug/L	24.1 ug/L
1-C109-CLF-24	first on the right @ sanitizing station	KF (dish washing)	27.5 ug/L	184 ug/L
1-C109-CLF-25	next to #24 on the left	KF (dish washing	15.0 ug/L	201 ug/L
1-C109-CLB-28	next to #27 on the left	Bubbler	108 ug/L	300 ug/L
1-C109-CLF-30	next to #29 on the right @dessert & salad station	KF (dish washing)	3.9 ug/L	278 ug/L
1-C109A-SF-36	on the right next to #35 @ sanitizing station	KF (dish washing)	3.2 ug/L	129 ug/L
1-C109A-SF-37	on the right #36 @sanitizing station	KF (dish washing)	3.0 ug/L	103 ug/L
1-C109A-SF-39	next to 38 on the right	KF (dish washing)	44.3 ug/L	384 ug/L
1-C103-CLF-41	on the right of #40 @ dessert station	KF (dish washing)	56.6 ug/L	241 ug/L
1-C103-CLB-42	located in room (C103) next to #43	Bubbler	11.5 ug/L	641 ug/L
1-C103-CLF-45	on the right of # 44	KF (dish washing)	3.9 ug/L	107 ug/L
1-C103-CLF-46	on the right of # 45	KF (dish washing)	2.8 ug/L	87.9 ug/L





Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-C103-CLF-49	At vegetable station	KF (dish washing)	3.7 ug/L	106 ug/L
1-C113-BRF-51	at center in bakery room (C113)	KF (dish washing)	1.5 ug/L	103 ug/L
1-C113-BRF-52	on the left of hand wash #53 in bakery room	KF (dish washing)	3.5 ug/L	103 ug/L
1-C113-BRF-55	on the right of #54	KF (dish washing)	2.8 ug/L	236 ug/L
1-C113-BRB-57	located next to custodial closet	Bubbler	2.2 ug/L	58.2 ug/L
1-HWC-CWF-59	across from C105 (left fixture)	DWF	39.6 ug/L	565 ug/L
1-HWC-CWF-60	across from C105 (right fixture)	DWF	3.8 ug/L	345 ug/L
1-104(MO)-B-61	in main office between restroom & Private room	Bubbler	19.0 ug/L	131 ug/L
1-1049-(MOC)-SF-62	clinic in main office across from AP	KF (dish washing)	3.1 ug/L	198 ug/L

Key: NA - Not Analyzed

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

Analysis of samples in Main office, Rm 103, rm 105, Rm 107, Rm 109, D wing hall, and the main hall 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.



46555 Humboldt Drive Novi, Michigan 48377 Telephone 248-669-5140 www.atcgroupservices.com

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 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

Marte & Somble

Martin K. Gamble Senior Project Manager Robert C. Smith
Building Science Department Manager

Robert C. Kiniz

<u>Attachments</u>

Attachment A: Fixture Inventory Locations Map/Form

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