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BUILDING SCIENCES • MATERIALS TESTING

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

May 18, 2018

Mathew Sam
Detroit Public Schools
1601 Farnsworth
Detroit, Michigan 48202

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

SUBJECT: **Drinking Water Screening Report**
Hutchinson @ Howe
2600 Garland
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.

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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 none of the samples analyzed were above the EPA recommended limits of 15 micrograms per liter (ug/L) for lead. One 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-K-KS-1	middle sink in kitchen	kitchen faucet	<1.0 ug/L	180 ug/L
1-K-KS-3	dish washing station on the back wall (left)	kitchen faucet	<1.0 ug/L	73.6 ug/L
1-K-KS-4	dish washing station on the back wall (right)	kitchen faucet	<1.0 ug/L	58.1 ug/L
1-HW-DWF-6	across from room 153	drinking water fountain	<1.0 ug/L	231 ug/L
1-124-CF-7	in the right side by the door (pk)	classroom faucet w bubbler	<1.0 ug/L	375 ug/L
1-124-CF-8	in the back of the room (PK)	classroom faucet w bubbler	<1.0 ug/L	437 ug/L
1-125-CF-9	in the front of the class(PK)	classroom faucet w bubbler	<1.0 ug/L	389 ug/L
1-125-CF-10	in the back of the room (PK)	classroom faucet w bubbler	7.2 ug/L	**1830 ug/L**
1-140-CF-11	on the right side (K)	classroom faucet w bubbler	<1.0 ug/L	285 ug/L
1-140-CF-12	between restrooms (K)	classroom faucet w bubbler	<1.0 ug/L	325 ug/L

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Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-142-CF-13	in the front of the class (K)	classroom faucet w bubbler	<1.0 ug/L	329 ug/L
1-142-CF-14	on the right in middle of the class (K)	classroom faucet w bubbler	2.3 ug/L	329 ug/L
1-143-CF-15	first on the left	classroom faucet w bubbler	<1.0 ug/L	321 ug/L
1-143-CF-16	next to conference room	classroom faucet w bubbler	2.8 ug/L	233 ug/L
1-123-CF-17	on the right	classroom faucet w bubbler	<1.0 ug/L	342 ug/L
1-123-CF-18	on the left	classroom faucet w bubbler	<1.0 ug/L	488 ug/L
1-131-CF-19	in middle of the class (PK)	classroom faucet w bubbler	<1.0 ug/L	790 ug/L
1-131-CF-20	on the right (PK)	classroom faucet w bubbler	<1.0 ug/L	217 ug/L
1-133-CF-21	on the left between restrooms (PK)	classroom faucet w bubbler	<1.0 ug/L	368 ug/L
1-133-CF-22	on the left in the back of class (PK)	classroom faucet w bubbler	2.4 ug/L	532 ug/L
1-137-CF-23	on the right between restrooms (PK)	classroom faucet w bubbler	<1.0 ug/L	459ug/L
1-137-CF-24	on the right in the back of class (PK)	classroom faucet w bubbler	7.1 ug/L	453 ug/L
1-120-CF-25	on the right	classroom faucet w bubbler	<1.0 ug/L	327 ug/L
1-117-CF-26	on the left	classroom faucet w bubbler	1.3 ug/L	505 ug/L
1-116-CF-27	on the right	classroom faucet w bubbler	4.4 ug/L	405 ug/L
1-113-CF-28	on the left	classroom faucet w bubbler	<1.0 ug/L	249 ug/L

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Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-MO-MOF-29	main office	kitchen faucet	1.0 ug/L	476 ug/L
2-246-CF-31	on the left	classroom faucet w bubbler	<1.0 ug/L	377 ug/L
2-243-CF-32	on the right	classroom faucet w bubbler	<1.0 ug/L	391 ug/L
2-242-CF-33	on the left	classroom faucet w bubbler	<1.0 ug/L	468 ug/L
2-239-CF-34	on the left	classroom faucet w bubbler	<1.0 ug/L	742 ug/L
2-238-CF-35	on the left	classroom faucet w bubbler	<1.0 ug/L	527 ug/L
2-238-CF-36	on the right	classroom faucet w bubbler	2.1 ug/L	780 ug/L
2-237-CF-37	on the left	classroom faucet w bubbler	<1.0 ug/L	474 ug/L
2-237-CF-38	on the right	classroom faucet w bubbler	<1.0 ug/L	686 ug/L
2-231-CF-39	on the left	classroom faucet w bubbler	4.3 ug/L	684 ug/L
2-228-CF-40	on the right	classroom faucet w bubbler	<1.0 ug/L	310 ug/L
2-227-CF-41	on the left	classroom faucet w bubbler	<1.0 ug/L	844 ug/L
2-224-CF-42	on the right	classroom faucet w bubbler	<1.0 ug/L	637 ug/L
2-223-CF-43	on the right	classroom faucet w bubbler	<1.0 ug/L	374 ug/L
2-220-CF-44	on the left	classroom faucet w bubbler	2.0 ug/L	333 ug/L
2-219-CF-45	on the right	classroom faucet w bubbler	<1.0 ug/L	330 ug/L

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Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
2-216-CF-46	on the left	classroom faucet w bubbler	<1.0 ug/L	264 ug/L
2-SWR-SRF-47	on the right	classroom faucet w bubbler	<1.0 ug/L	470 ug/L
2-210-CF-48	on the right	classroom faucet w bubbler	1.2 ug/L	342 ug/L
2-209-CF-49	on the left	classroom faucet w bubbler	<1.0 ug/L	340 ug/L
2-206-CF-50	on the right	classroom faucet w bubbler	3.9 ug/L	707 ug/L
2-203-CF-51	on the left classroom faucet w bubbler	classroom faucet w bubbler	<1.0 ug/L	358 ug/L
2-215-CF-52	Room 215	Classroom faucet w bubbler	<1.0 ug/L	402 ug/L
2-215-CF-53	Room 215	Classroom Faucet w bubbler	1.6 ug/L	507 ug/L

Key: NA - Not Analyzed

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

Analysis of sample for room 125 indicates that copper 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.

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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

Martin K. Gamble
Senior Project Manager

Robert C. Smith
Building Science Department Manager

Attachments

Attachment A: Fixture Inventory Locations Map/Form
Attachment B: Fixture Inventory Photo Log
Attachment C: Laboratory Analytical Report