ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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

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-DRAFT
Cass Tech High School
2501 Second 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.

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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

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 of the samples analyzed were above the EPA recommended limits of 15 micrograms per liter (ug/L) for lead. Four 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 16, 2018)

Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
3-K-KS-20	Kitchen	2 chamber sink to the left	<1.0 ug/L	211 ug/L
3-K-KS-23	Kitchen	Wash sink	1.7 ug/L	249 ug/L
3-K-KS-26	Kitchen	3 chamber sink, left	1.3 ug/L	361 ug/L
3-K-KS-27	Kitchen	3 chamber sink, center	<1.0 ug/L	215 ug/L
3-K-KS-28	Kitchen	3 chamber sink, right	<1.0 ug/L	135 ug/L
6-Hall-B-3	Next to boys restroom, near A609	left	<1.0 ug/L	324 ug/L
6-Hall-B-4	Next to boys restroom, near A609	right	<1.0 ug/L	315 ug/L
6-Hall-B-1	Next to girls restroom, near media center	left	<1.0 ug/L	323 ug/L
6-Hall-B-2	Next to girls restroom, near media center	Right	<1.0 ug/L	364 ug/L
5-Hall-B-7	Next to girls restroom, near A517	left	<1.0 ug/L	370 ug/L

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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

Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
5-Hall-B-8	Next to girls restroom, near A517	Right	<1.0 ug/L	400 ug/L
4-Hall-B-9	Next to A416 Janitor's closet	left	<1.0 ug/L	418 ug/L
4-Hall-B-10	Next to A416 Janitor's closet	Right	<1.0 ug/L	386 ug/L
4-Hall-B-11	Next to boys restroom, near stairs	Left	<1.0 ug/L	299 ug/L
4-Hall-B-12	Next to boys restroom, near stairs	Right	<1.0 ug/L	309 ug/L
3-Hall-B-13	Next to mens restroom and store	Left	<1.0 ug/L	666 ug/L
3-Hall-B-14	Next to mens restroom and store	Right	<1.0 ug/L	585 ug/L
3-Hall-B-15	Next to womens restroom	Left	1.1 ug/L	836 ug/L
3-Hall-B-16	Next to womens restroom	Right	<1.0 ug/L	734 ug/L
2-A233-SRF-33	In room A233 Attendance Office		<1.0 ug/L	309 ug/L
2-Hall-B-31	Next to A215 Storage Room	Left	4.1 ug/L	**2300 ug/L**
2-Hall-B-32	Next to A215 Storage Room	Right	2.6 ug/L	**1590 ug/L**
2-B235-B-34	In room B235	On track	<1.0 ug/L	352 ug/L
2-MO-SRF-37	Main office A200, work room		<1.0 ug/L	368 ug/L

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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

Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
2-MO-SRF-38	Main office A200, break area (gym visible)		<1.0 ug/L	283 ug/L
2-B242-B-35	In room B242	In weight room	<1.0 ug/L	123 ug/L
2-B242-B-36	In room B242	In room B242	<1.0 ug/L	165 ug/L
1-B121-B-40	Main Gym across from exit 24 at Women's Locker Room door		<1.0 ug/L	273 ug/L
1-B121-B-41	Main Gym, back corner	left	<1.0 ug/L	282 ug/L
1-B121-B-42	Main Gym, back corner	right	<1.0 ug/L	290 ug/L
1-B121-B-39	Main Gym at B124 Men's Locker Room door		<1.0 ug/L	192 ug/L
1-Hall-B-43	Across from room A111 next to Men's Restroom	left	<1.0 ug/L	104 ug/L
1-Hall-B-44	Across from room A111 next to Men's Restroom	right	<1.0 ug/L	104 ug/L
1-Hall-B-45	Next to C128 Women's Locker Room	Left	<1.0 ug/L	272 ug/L
1-Hall-B-46	Next to C128 Women's Locker Room	right	<1.0 ug/L	263 ug/L

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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

Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-E133-B-49	Receiving Dock		<1.0 ug/L	187 ug/L
1-C130-B-47	Pool	Left	**20.9 ug/L**	**11200 ug/L**
1-C130-B-48	Pool	Right	**18.9 ug/L**	**6260 ug/L**

Key: NA - Not Analyzed

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

Analysis of samples in the pool area indicates that lead levels were above the MCL. Analysis of samples in the pool area and the second floor hallway and indicate 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.
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.

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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

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