

MCPS WATER SAFETY WORKGROUP

Location: Facilities Maintenance Depot, Conference Room 1
Date: March 28, 2019
Time: 9:30 am – 12:00 pm

Agenda Items

- 9:30-9:40** **Welcome**
- Review and Confirm Minutes from 2/28/2019 Meeting (All)
Update pending regulations (All)
- 9:40-9:50** **Follow up from last Meeting**
MCPS Data Review
1. School highlighted with a red dot (40-49 fixtures) in the eastern quadrant of the “MCPS Schools With Greater Than 10% of Fixtures Above 5 ppb Action Level” GIS MAP (slide 4)
 2. Food and Nutrition Services Facility testing data
 3. Instant hot water outlet testing data
 4. Chart displaying “Non Detect” data by Fixture Type & Type of School
- 9:50-10:15** Additional information gathered
1. Investigate fixture lead levels based on manufacturer (MCPS)
 2. City of Rockville corrosion inhibition practices (MCPS/DEP)
 3. Bottle filling stations implementation in Michigan and Oakland County (MCCPTA)
 4. Chicago school system automated flushing protocols (MCCPTA/MCPS)
 5. Plumbing code- drinking fountain requirements (WSSC)
 6. Water management programs (NSF)
- 10:15-11:30** **Begin Draft of Options/Recommendations (ALL)**
Options for Discussion
1. Action Level Priorities
 2. Flushing & Education
 3. Communication to Parents
- 11:30-11:45** **Next Steps/Deliverables for next meeting – Final Report**
- 11:45-11:55** **Next Meeting proposed dates: Monday April 29 morning?**
Final Analysis
Review Recommendations
- 11:55-12:00** **Meeting Analysis**

9:30 am – 12:00 pm
Water Safety Work Group

Meeting Notes from March 28th, 2019

Participants:

Harold Chase	NSF International, Legislative Director
Sean Gallagher	Montgomery County Public Schools (MCPS), Assistant Director, Department of Facilities Management
Teresa Lloyd	MCPS, Environmental Specialist
Rebecca Morley	Montgomery County Council of PTAs (MCCPTA), Chair, Safe Water Committee
Brian Mullikin	MCPS, Team Leader, Environmental Services and Indoor Air Quality Services
Peter Park	MCPS, Team Leader, Systemwide Safety Programs
Christine Rogewitz	MCPS, Admin. Secretary II
Tim Rule	Maryland Department of the Environment (MDE), SDWA Implementation
Jin Shin	Washington Suburban Sanitary Commission (WSSC), Division Manager, Water Quality
Laura Stewart	MCCPTA, Vice President of Advocacy
Lynne Zarate	MCPS, Director, Division of Maintenance

Absent:

Dr. Travis Gayles	Department of Health and Human Services (DHHS), Health Officer
Nasser Kamazani	Montgomery County Government (MCG), Senior Engineer, Department of Environmental Protection (DEP)
Fred Mason	Maryland State Department of Education (MSDE), Branch Chief, School Facilities

The meeting commenced with a request for attendees to review previous meeting minutes and the revised action plan.

WSSC suggested comments be added to the notes from last meeting. There was a discussion regarding the preferential usage of bottle filling stations potentially causing water stagnation in other fixtures. This may increase the importance of flushing procedures. It was mentioned that the costs associated with flushing may not be insignificant, but the health benefits outweigh the additional costs. As a best practice, it was suggested that teachers and/or students flush bubblers each morning particularly in kindergarten, 1st, and 2nd grade classrooms. It was discussed that by having teacher and student participation in the classroom fixture flushing, it has an educational effect that might be communicated and practiced outside of school.

There were no additional comments on the previous meeting's notes.

Follow-up

MCPS Data Review

1. GIS Maps displaying schools where the percentage of samples exceeds 10% of the total samples at various levels (5, 10, 15, and 20 ppb).

The red dot in the eastern quadrant was identified as Stonegate ES.

2. Food and Nutrition Services Facility testing data

The data for the Food and Nutrition Services Facility was reviewed. There are two fixtures greater than 5 ppb, both fixtures have been taken out of service and are scheduled for replacement.

3. Instant hot water outlet testing data

All hot water outlets are <1 ppb and most are located in break rooms utilized by adult staff members.

4. Chart displaying “Non Detect” data by Fixture Type & Type of School

It was mentioned that bubblers and coolers, located in facilities constructed after 1996, have a higher likelihood of supplying water with a below the detection limit for lead (<1 ppb) in comparison to similar fixtures in buildings constructed before this time period. The amendment of the Safe Drinking Water Act (SDWA) was noted as the likely contributing factor.

When comparing the various dates of construction provided by the chart, bubblers appear to supply water <1 ppb less frequently than other outlets. It was recommended that bubbler replacement could be prioritized by school age.

Additional information gathered

Post Remediation Data & Challenges

1. Investigate fixture lead levels based on manufacturer (MCPS)

MCPS confirmed that the replacement fixtures comply with the most current NSF regulations. Elevated lead levels in replacement fixtures may be attributed to sources of lead other than the fixture or a lack of passivation of the replacement fixture. Additionally, it was mentioned that daily flushing several weeks prior to retesting may be useful to aid in passivation and mitigate stagnation.

Further investigation is needed, actions could include replacing the piping to the main trunk, or removing the fixture from service. It was suggested that filters could be used for bubblers in classrooms.

Information related to the length of time between fixture being taken out of service and replacement and retesting was requested to determine if there is a correlation to post remediation testing data. (MCPS)

2. *City of Rockville corrosion inhibition practices (MCPS/DEP)*

The City of Rockville uses Orthophosphate as a corrosion inhibitor.

3. *Bottle filling stations implementation in Michigan and Oakland County (MCCPTA)*

Contact information for the Oakland County, Michigan School System will be supplied. (MCCPTA)

4. *Chicago school system automated flushing protocols (MCCPTA/MCPS)*

The automatic flushing system implemented for bubblers and coolers by the Chicago School system was presented, initial and ongoing maintenance costs associated with automatic flushing are relatively costly. Additionally, there are potential implementation challenges to installing automatic flushing stations on classroom bubblers due to the need for an adjacent mechanical closet/space.

5. *Plumbing code- drinking fountain requirements (WSSC)*

WSSC has adopted the International Plumbing Code (IPC), Table 403.1, requirements of one drinking fountain per 100 occupants for an educational facility.

Confirm number of drinking outlets installed at MCPS facilities in relation to the occupant population. (MCPS)

Draft of Options/Recommendations (See Attached Document)

There was discussion about the recently passed MD House Bill altering the definition of “elevated levels of lead” to concentrations exceeding 5 ppb, and MCPS action to proactively adopt the new action limit.

Category I: Action Level Priorities- primary drinking outlets

The Draft Water Safety Work Group Options for Discussion Action Plan was presented for review and modification as a guideline for the development of the final report.

1. *Water Coolers*

All water coolers that tested above 5 ppb (22 coolers) will be taken out of service and replaced. Bottle filling stations will be considered in suitable locations. The locations will be analyzed to determine optimal placement such those areas with high demand for drinking water, e.g., cafeterias, gyms. It was mentioned that UV disinfection could be used to combat biological contaminants in bottle filling stations. The use of filtration in bottle filling stations was discussed as a means of encouraging hydration and to improve taste. It was mentioned that there may be issues (i.e. breakthrough) associated with the use of filters. It was recommended that a cost benefit analysis may be performed for the use of filters and a targeted approach could be used for their implementation.

Research will be conducted to determine types of filters used by other school districts e.g. Boston. (MCPS)

CDC document regarding bottle filling stations will be posted to the Google Drive. (MCPS)

Contact information will be provided for District of Columbia Public Schools. (MDE)

2. Bubblers

Bubblers with test results of ≥ 5 ppb will be removed from service in all classrooms. Replacement of these fixtures will be considered as demand is assessed. Those locations with small children will be prioritized to receive replacement fixtures.

It is difficult to estimate replacement and retesting costs for the proposed 5 ppb action level due to the uncertainties and challenges of remediating fixtures that comply with the lower action level.

3. Other Faucets

Sinks that are intended for hand washing only will have appropriate signage displayed.

It was observed that the current signage language could be improved by emphasizing that the water is not “safe” for drinking. A concern was raised that signage language should also not discourage hand-washing and that words such as “safe” or “unsafe” could result in occupants being afraid to wash their hands. This will be considered for future signs.

4. Consider adopting new NSF standard for schools once finalized.

No additional information was available on the development of a future standard for voluntary manufacturer certification of fixtures at < 5 ppb.

Category II: Flushing

MCPS uses manual flushing not as a remedial option but as a best practice to aid in lead reduction, promote the distribution of corrosion inhibitor and to lessen water stagnation. It was suggested that flushing could be used as an education tool to encourage flushing in homes.

Category III: Education and Communication to Parents (“Education and” added to title - MCPS)

It was suggested that risk communication information be included in letters sent to parents similar to the language presented in the “Discussion Section” of the Lead in Water Drinking Water Testing Reports. Also, it was recommended that the Discussion Section of the reports be presented in bullet format and all parents should receive information discussing the risks of lead.

The MCPS Drinking Water Testing Program website should be expanded to include a Frequently Asked Questions (FAQs) section.

MDE will provide link to FAQs.

WSSC educational link for MCPS page

- <https://www.wsscwater.com/wqr>

It was suggested that a searchable version of all testing data be available on the MCPS website.