DRINKING WATER LEAD MANAGEMENT PLAN

Monroe One BOCES
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I. Introduction

The purpose of this Drinking Water Lead Management Plan is to document Monroe One BOCES, M1B, effort to comply with NYS Public Health Law by assessing potential drinking and cooking water problems, mitigate any discoveries of elevated lead levels in drinking water, and record these efforts.

As a consumer, not a supplier of public drinking water, the regulations that affect suppliers and the construction of public water systems do not affect M1B. All the facilities M1B manages are supplied from Monroe County Water Authority, MCWA, 475 Norris Drive, PO Box 10999, Rochester NY 14610-0999. MCWA proudly states on their website www.mcwa.com: "There is no lead in the water we deliver to your home. (It is possible for water to pick up lead from home plumbing solder or fixtures if it sits in the pipes for a long time, but tests show this is not a problem in our service area.)" However, the materials used in water distribution have only recently been regulated for lead content. New York State banned lead solder from use in plumbing in 1986, but the Reduction of Lead in Drinking Water Act did not mandate "lead-free" fixtures until January 4, 2014. But "lead-free" is not lead-free; it is defined as a maximum of 0.2% lead content in solder and flux and a 0.25% maximum average lead content for products such as brass parts, faucets, valves used within the "wetted surface area" of the water system. There is no requirement to replace or retrofit fixtures installed before January 4, 2014. Therefore, there is a risk, especially in older buildings, that water traveling through older plumbing pipes and fixtures could pick up and carry lead contamination. Soft water, acidic water and hot water further heighten water's ability to carry lead.

After the national concern for the Flint, Michigan water quality at the turn of 2016, some local school districts sampled their water and announced results of some samples exceeding the United States Environmental Protection Agency (EPA) action level for lead in drinking water. This caused great concern within our community. M1B began sampling drinking water in April 2016.

In September 2016, NYS S.8158/A.10740 was passed and schools were required to sample drinking water for lead contamination every five years, using the EPA protocol, starting no later than October 31, 2016, and then discontinue use of any potable water outlets with a lead level above 15 ppb (parts per billion). Further, these results were required to be reported on the school district's website, to staff and parents, to the local health department and to the NYS Health Department's electronic reporting system. Further, re-sampling and reporting is required before a discontinued outlet may be reused as a potable water source.

NYS Public Health Law Section 1110 was adopted May 2018, amended 12/23/2021, and then revised 12/22/2022. This tightening the NYS standard for drinking and cooking water in schools to not exceed 5 ppb of lead. In addition, NYS schools must sample these water outlets for drinking and cooking water every three years. Re-sampling within that period is still required before a discontinued outlet may be reused as a potable water source.

II. Risks

While the Centers for Disease Control and Prevention (CDC) states that "lead-based paint and lead contaminated dust are the most hazardous sources of lead for US children" and that ". . . exposure to lead-contaminated water alone would not be likely to elevate blood lead levels in most adults, even exposure to water with a lead content close to the EPA action level for lead of 15 parts per billion (ppb)." Lead poisoning is defined as blood levels exceeding 10 micrograms of lead per deciliter of blood in children under the age of 6. Children, due to consumption level relative to their body size, and pregnant women due to the risk to the fetus, have unique risks. Lead is toxic and can harm a child's brain, kidneys, bone marrow and other body systems, due to our body's inability to distinguish between lead and calcium. Lead poisoning may result in cognitive and intelligence function impairment, hearing loss and lack of height in children. The CDC affirms that there is no safe blood level of lead. The EPA estimates that drinking water accounts for 10 - 20% of ingested lead. Although drinking water may be a minor contributor, lead's toxicity warrants action. The small range of safety is why NYS set our school standard to be equal to or less than 5 parts per billion.

III. Sampling Plan

The NYS Public Health Law requires the sampling under its regulations to:

- Start between 01/01/2023 and 12/31/2025 and then every three years thereafter.
- Use First-Draw sampling which is to collect from each cold-water outlet used for, or potentially used for, drinking or cooking, after the water in the pipes had been

motionless for a minimum of 8 – 18 hours. The recommendation is to sample before staff arrive, in the morning following a school day.

- The sampling protocol will continue to follow the EPA recommendations:
    - 250 mL sample size.
    - Aerators and screens not removed prior to sampling.
    - Samples will be placed in containers provided by the testing lab for the purpose, stored according to the testing lab's protocol, and remain in the custody of the lab hired to do the testing.
- Outlets testing greater than 5 ppb will be taken out of service and remediation will be implemented.

Outlets excluded from drinking or cooking use, with the Superintendent's approval, may include:

- Dishwashing sinks
- Bus garage sink (unless occupied by students)
- Science and art sinks
- Classroom sinks with controls to prevent drinking or cooking
- Toilet room and bathroom sinks
- Tempered water (providing between 80 – 100 degrees F) outlets
- Utility closet sinks
- Exterior hose bibs (if not used for drinking).

To prevent access to these excluded outlets a Sampling Plan must identify the specific exclusions, and the controls used to prevent drinking or cooking use. Excluded outlets will have a sign posted "Do Not Drink."

IV. Reporting

The NYS Public Health Law has specific reporting requirements:

- Within one business day of receipt of lab reports:
    - Report all outlets with greater than 5 ppb lead to the local health department.
    - Remove access to accessible outlets with lead level greater than 5 ppb by removal, signage, or education.
- Within ten business days of receipt of lab reports:
    - Report in writing all outlets with greater than 5 ppb lead to staff, parents, and guardians.
    - Report all results to NYS DOH's HERDS application on HCS with:
        - "School Lead in Drinking Water Reporter" role identification

        - "HPN/HCS Coordinator" role identification
        - General identification and website address of each school
        - Number of outlets sampled sampling information
        - Lead analysis results
        - Remediation actions and status
- Within six weeks of the receipt of lab reports:
    - Post copies of the lab reports on the website.
    - Provide information about remedial actions taken.
- Required record retention is:
    - Maintain information on the website until replaced by next sampling cycle.
    - Retain water testing records, per Subpart 67-4, for ten years.
    - Provide copies of documents upon request by the Monroe County DOH, NYS DOH, or SED.
- Post re-mediation actions required:
    - If an outlet is returned to use after remediation, it must be re-sampled.
    - Post-remediation test results must be reported to both DOH's HERDS application, within ten days, and the school website within six weeks.

V. Monroe One BOCES Locations for Water Testing

Excluded are those fixtures in locations which M1B occupies within its component school districts. Those location's water systems are maintained by that local district. Included in this exclusion is the Bid-Morgan School, 108-120 East Ave, East Rochester NY 14445 where the East Rochester Union Free School District is the owner and landlord and have taken the responsibility to test and report on the water within that building.

Similarly, the landlord is responsible for water system maintenance and sampling at the Monroe One Center for the District and Business Offices at 1000 Pittsford Victor Rd, Pittsford, NY 14534.

The nine locations that will be regularly sampled in accordance with NYS Public Health Law are:

1	Foreman Center, Bldg 1,2,3	41 O'Connor Rd, Fairport, NY 14450
2	Vocational Building, Bldg 4,5,6	38 O'Connor Rd, Fairport NY 14450
3	Safety and Security Offices, Bldg 7	38 O'Connor Rd, Fairport, NY 14450
4	Natatorium, Bldg 8	41 O'Connor Rd, Fairport NY 14450
5	O'Connor Academy, Bldg 9,10	25 O'Connor Rd Fairport, NY 14450
6	Transportation Center	79 O'Connor Rd, Fairport NY 14450

7	Harris Education & Tech Center	2596 Baird Rd, Penfield NY 14526
8	Technology Services	11 Linden Park, Rochester NY 14625
9	Staff Development Services	15 Linden Park, Rochester NY 14625

Water samples will be monitored from all fixtures intended to provide water for consumption: drinking fountains, food preparation sinks in kitchens and break rooms, ice makers, and kitchen appliances with directly piped water connections. Excluded outlets will continue to be toilet room hand washing sinks, custodial closet sinks, laundry sinks, emergency and physical education locker room showers, eye wash stations, science lab sinks, art lab sinks, and hand washing sinks for auto, construction, and welding shops. Occasionally an excluded fixture may be included in sampling for understanding distribution within a building or if coffee mugs or other evidence of food preparation use was suspected at the time of sampling.

VI. Remediation Action Plans:

If the results of the water sampling show lead at levels of 5 ppb or above actions that may be required include:

1. Education that safe drinking water practices include:
    a. Using only cold water for drinking and food preparation.
    b. Upon the first use of water after dormancy, allow the faucet to flush for not less than 60 seconds before drawing water for consumption.
    c. Respect “Do Not Drink” signs and avoid drawing water from custodial sinks, bathrooms and other locations not designed for consumption.
2. Review of Preventative Maintenance procedures to ensure:
    a. Documented flushes of hot water tanks and other low-lying sections that may accumulate sediment.
    b. Documented drinking fountain filters, and other point of use filters, timely replacement service.
    c. Documented cleaning of aerators and screens on the fixtures that serve water for human consumption.
3. Replacement of fixtures that are suspected of being a lead contamination source.
4. Assessing the plumbing profile of affected locations to identify:
    a. Piping sediment traps
    b. Piping dead-ends
    c. Cross connections between the cold and hot water system
    d. Leaded valves
    e. Piping runs with lead solder
    f. Older brass fittings that may introduce lead into the water.
5. Replacement of electrical equipment grounds to the water pipes with an engineered alternative such as copper stakes in a ring driven into the earth.

6. Installing drain connections on low points to regularly remove sediment from water lines and a preventative maintenance procedure to ensure regular service.

VII. Water Testing and Lead in Water References

References used to create this management plan as well as links for further information:

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