

# MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY



# **Clean Drinking Water Access Act**

# **Drinking Water Management Plan for Schools**

Berrien Springs Middle School	
School Building Name	
00296	Berrien Springs
School Building Code	School District
Child Care License Number (if one exists	s within the school building)
Ron Bartz	Director of Facilities
Responsible Staff Name	Responsible Staff Title
269-473-0681	rbartz@homeoftheshamrocks.org
Responsible Staff Phone Number	Responsible Staff Email Address
2024-25	1/24/2025
School Year Plan Date	Update Plan Due-By Date
March	MI0000650
Annual Sampling Month	Public Water System ID (PWSID)*

\*A PWSID is how a water supply is identified. A list of PWSIDs is available at Michigan.gov/FilterFirst.



The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has created the Drinking Water Management Plan (DWMP) as a tool to maintain healthy and safe drinking water in the building throughout the year. This document is a template that may be used for the DWMP per the requirements of the Clean Drinking Water Access Act (CDWAA), 2023 PA 154. Schools may use this document or create their own plan, provided it includes all the required elements listed below. Individual forms for each required element may be found at Michigan.gov/FilterFirst.

Retain and utilize the DWMP. The first DWMP must be developed by January 24, 2025, and updated at a minimum of every 5 years per the CDWAA. Upon request, the DWMP shall be made available to EGLE, staff, parents and guardians, and the public.

### The DWMP must include the following required elements:

- 1. The location of each consumptive water outlet (drinking, as a component of a food or beverage, rinsing foods, brushing teeth, making baby formula):
  - a. Location of filtered bottle-filling station (1/100 occupants of the building).
  - b. Location of filtered faucet (kitchens, nurse stations, preschool classrooms, teacher lounges).
- 2. The location where a water outlet will be maintained for purposes other than described above (nonconsumptive fixtures).
- 3. The location where a water outlet will be shut off or rendered permanently inoperable.
- 4. A schedule for when each of the following will occur:
  - a. Annual water sampling and testing of the filtered water at each filtered bottle-filling station and filtered faucet.
  - b. Regular replacement of the filter cartridge for each filtered bottle-filling station and filtered faucet in compliance with the manufacturer's instructions or recommendations of EGLE.

Each school shall submit the CDWAA Certification Form that certifies the school has complied with the requirements of the CDWAA to EGLE on an annual basis by August 15. The certification form can be found at <a href="Michigan.gov/FilterFirst">Michigan.gov/FilterFirst</a>. All current required documents must be retained by the facility and submitted to EGLE if requested.





## **Contents**

General Information	4
Key Terms:	4
Acronyms:	5
Maintenance Categories:	5
Roles and Responsibilities:	6
Fixture Identification Code Development Guidelines:	7
Forms	9
A. Consumptive Fixture Inventory:	9
B. Non-Consumptive Fixture Inventory:	11
C. Inoperable Fixture Inventory:	13
D. Filter Maintenance Schedule:	14
E. Sampling Schedule:	16
Appendix A: Summary of the Clean Drinking Water Access Act (2023 PA 154)	19
Appendix B: Water Sampling Guidance & Instructions	21
Annual Sampling and Testing Result Actions	23

EGLE does not discriminate on the basis of race, sex, religion, age, national origin, color, marital status, disability, political beliefs, height, weight, genetic information, or sexual orientation in the administration of any of its programs or activities, and prohibits intimidation and retaliation, as required by applicable laws and regulations.

To request this material in an alternate format, contact EGLE-Accessibility@Michigan.gov or 800-662-9278.





### **General Information**

# **Key Terms:**

**Bubbler Fixture:** A fixture on a drinking water fountain/water cooler through which water is forced up in a small arc from a nozzle that allows an individual to drink from the arc directly.

**Consumption Water:** Water used for drinking, component of food or beverage, or brushing teeth, rinsing food, and making baby formula.

**Department:** The Department of Environment, Great Lakes, and Energy (EGLE)

**Drinking Fountain:** An un-chilled plumbing fixture that is connected to the potable water distribution system and drainage system that allows a user to obtain a drink directly from a stream of flowing water without the use of any accessory.

**Filtered Bottle-filling Station (also known as Hydration Station):** An apparatus that is connected to building plumbing, filters water, is certified to meet NSF/ANSI standard 53 for lead reduction and NSF/ANSI standard 42 for particulate removal, has a light or other device to indicate filter cartridge performance, is designed to fill drinking bottles or other containers used for personal water consumption, and has a bubbler fixture that allows the user to drink directly from a stream of flowing water without the use of any accessory.

**Filtered Faucet:** A faucet that includes at the point of use a filter that is certified to meet NSF/ANSI standard 53 for lead reduction and NSF/ANSI standard 42 for particulate removal.

**First Draw:** The first 250 mL sample of water from a fixture after at least an 8-hour stagnation period.

**Fund:** School and child care center clean drinking water fund created in section 11 of PA 0154.

**School:** Public or nonpublic as defined in section 5 of the revised school code, 1976 PA 451, MCL 380.5.

**Water Cooler:** a plumbing fixture that chills the water and is connected to the potable water distribution system and drainage system that allows a user to obtain a drink directly from a stream of flowing water without the use of any accessory.





# **Acronyms:**

# **Maintenance Categories:**

**Preventive Maintenance:** Planned and carried out on a regular basis to maintain and keep infrastructure in good condition.

**Corrective Maintenance:** Replacing or repairing something done incorrectly or needing change for improvement.

**Emergency Maintenance:** Reaction to a crisis or public complaints normally due to failure, malfunction, or breakdown of plumbing/equipment.

**Periodic Maintenance:** Infrequent actions needed, for example biannual, once in five years, etc.





# **Roles and Responsibilities:**

List the names of school staff or third-party contractors who play a role or have responsibilities for following and executing the DWMP. May include contacts for filter and bottle fill station manufacturers/distributors.

Person's Name	Title or Company	Phone Number	Email Address	Role or Responsibility
R Bartz	Director of Facilities	269-473-0681	rbartz@homeoftheshamrocks.org	Administrator of Plan
N Schmidt	Maintenance			Inventory / Filter Changes
R Schmidt	Maintenance			Filter Changes
S Corbett	Leeps Supply			Filter / Equipment Supplier
D Scott	Zurn Elkay			Filter / Equipment Rep
	BC Mechanical			Equipment Installler
	Garrett Labs			Water Testing

### Comments:





# **Fixture Identification Code Development Guidelines:**

It is important to follow these guidelines to generate a unique fixture identification code (Fixture ID) for each fixture used for consumption to support: quick identification, fixture maintenance, sampling, matching test results to the sample, and reporting to EGLE when necessary (Note: adhering to this coding system now will save time in the future when reporting to EGLE's on-line electronic data collection system, will promote consistency, and reduce sample confusion).

The following table lists the fixture type codes that are used for compliance sampling and reporting purposes to EGLE.

**Table 1: Fixture Type Codes** 

Code	Fixture Type
В	Bubbler outlet on the bottle fill unit (hydration station)
BF	Bottle fill outlet
CF	Classroom faucet
DF	Drinking Fountain
IM	Ice machine
KF	Kitchen faucet
KK	Kitchen kettle-fill
NS	Nurses sink faucet
ОТ	Other faucet used for consumption (in a break room, office, library, etc.)
RF	Restroom faucet (used for consumption)
SC	Service Connection (Tap closest to the service line)
TL	Teachers' lounge faucet
WC	Water Cooler (plug-in chiller unit/ refrigerated unit)





#### Generating the fixture identification code:

The Fixture ID should be long enough to identify the building, location, and fixture type, but not too long that the laboratory reporting cuts off some of the code (maximum of 20 for State Laboratory reports). The Fixture ID is created as follows:

- 1. The Fixture ID code starts with 2-3 letters for the building name.
  - a. Example: West Elementary = WE
  - b. Example: Wilson High School = WHS
- 2. The middle part of the Fixture ID code is the location.
  - a. Example: Room 110 = 110
  - b. Example: West wall of the Gym = WGym
  - c. Example: East wall of the Gym = EGym
  - d. Example: Second floor hallway by room 201 = 2FH201 or 201HALL
- 3. The last part of the Fixture ID code is the fixture type found on Table 1 above. Adhering to these codes is needed for reporting consistency and statistical analysis.

If following the EGLE coding system, dashes in between the three sections must be used. Below are examples of complete Fixture ID codes for some fixtures in one building:

1. WE-110-CF

- 4. WE-2FH201-BF
- 7. WE-KIT-IM

- 2. WE-WGYM-BF
- 5. WE-2FH201-WC
- 8. WE-150-TL

- 3. WE-WGYM-WC
- 6. WE-KIT-KF
- 9. WE-100-NS

Example for bottle-filling stations (include a bottle-filling outlet and bubbler outlet)

- 1. WE-BF1-BF (bottle fill) and
- 2. WE-BF1-WC (bubbler outlet of unit)
- WEC-BF1WC-WC (the bubbler outlet of an ADA compliant cooler next to the station).

If you have multiple bottle-filling units in the building halls, the middle part of the code can designate the unit number, starting with the unit closest to the water point of entry into the building. Exact location will be recorded on the inventory list and may also be located on a floor plan/map.

- 1. WE-BF1-BF and WE-BF1-WC
- 2. WE-BF2-BF and WE-BF2-WC
- 3. WE-BF3-BF and WE-BF3-WC
- 4. WE-BF4-BF and WE-BF4-WC and WE-BF4WC-WC (for the ADA water cooler next to the bottle-filling unit).





**Forms** (retain until updated or 5-year revision – submit only if requested by EGLE) Separate inventory sheets can be found at Michigan.gov/SchoolWater.

# A. Consumptive Fixture Inventory:

The CDWAA requires every consumptive fixture in a building to be identified and location recorded. The category of each consumptive fixture should be specified as a filtered bottle-filling station or filtered faucet. "Number" is the order of sampling starting at the fixture closest to the water POE into the building. List here, include additional pages if needed, update as needed and keep a copy for your records.

**Table 2: Filtered Fixture Inventory** 

Number	Fixture ID Code	Fixture Location	Filter Brand & Model #	Category of Fixture
1	MS-LH-BF-WC	Library hallway - South		
2	MS-LH-BF-WC	Library hallway - North		
3	MS-136-WC-BF	Hallway outside rm 136		
4	MS-CAFÉ-WC-BF	Cafe		
5	MS-FH-BF-WC	Front hallway		
6	MS-TL-TL	Teacher Lounge		
7	MS-KIT-KF	Kitchen		
8	MS-NUR-WC	Nurse Office		
9	MS-BRK-WC	Break room in Office		
10	MS-HE-CF1	Home Ec room		
11	MS-HE-CF2	Home Ec room		
12	MS-HE-CF3	Home Ec Room		





Number	Fixture ID Code	Fixture Location	Filter Brand & Model #	Category of Fixture
13	MS-HE-CF4	Home Ec Room		





# **B. Non-Consumptive Fixture Inventory:**

The CDWAA requires every non-consumptive fixture in a building to be identified and recorded. Specify the location where a water outlet will be maintained for purposes other than drinking or addition to food or beverages. "Number" is the order of fixtures starting with the fixture closest to the water POE into the building. Include additional pages if needed, update as needed and keep a copy for your records. Note: Nonconsumptive fixtures in a kitchen are those for hand or dish washing and not water used as an addition to a food for food preparation.

**Table 3: Non-Consumptive Fixture Inventory** 

Number	Fixture Location (room # or description)
1	Hand sink faucet – Nurses Office
2	Hand Sink Faucet – Staff Restroom office
3	Hand sink Faucet – Staff Restroom Front hallway
4	Hand sinks faucets (3) – Girls Restroom Front hallway
5	Hand sink faucets (3) – Boys restroom Back hallway
6	Hand sink Faucet – Boys PE office
7	Hand sink Faucet – Girls PE office
8	Hand sink Faucets (3) – Girls PE
9	Hand sink Faucets (2) – Boys PE
10	Custodian Sink Faucet – Music hallway
11	Custodian Sink faucet – Boys PE
12	Hand Sink faucet – Mens Staff restroom back hallway





Number	Fixture Location (room # or description)
13	Custodian Sink Faucet – Main Room
14	Hand sink Faucet – Kitchen Pantry
15	Classroom Faucet – Art room
16	Hand sink faucets (3) Boys Restroom Library hallway
17	Hand sink faucets (3) Girls Restroom library hallway
18	Hand sink faucets (2) Staff restrooms library hallway
19	Custodian sink faucet – library hallway
20	Science lab faucets – Room 115
21	Science Lab faucets – Room 116
22	Hand sink faucet – Room 106
23	Hand sink faucet – Room 108
24	Classroom faucet – Room 146
25	Exterior Sillcocks (8)
26	
27	





# **C.** Inoperable Fixture Inventory:

The CDWAA requires a list of the location(s) where a water outlet is shut off or rendered permanently inoperable.

Table 5: Fixture Not in Use Program/School Year:

Number	Fixture Location (room # or description)
Ex: 1	Bubbler in classroom 123 – water line shut off, will be permanently removed on 6/15/24





#### D. Filter Maintenance Schedule:

The CDWAA requires a filter maintenance schedule. Use this form to track filter maintenance. It is recommended that drinking water filters are to be checked weekly to be sure they are operational, and the green status light is on. Filters/cartridges must be replaced according to manufacturer's recommendations or if the RED filter status light is showing. Record the date and initials of the person who replaced the filter or cartridge.

**Table 5: Filter Maintenance Schedule** 

Fixture ID Code	Filter Cartrid ge Model	Filter or Cartridge Replace Date	Initials								
MS-LH-BF-WC											
MS-LH-BF-WC											
MS-136-WC-BF											
MS-CAFÉ-WC-BF											
MS-FH-BF-WC											
MS-TL-TL											
MS-KIT-KF											
MS-NUR-WC											
MS-BRK-WC											
MS-HE-CF1											
MS-HE-CF2											





Fixture ID Code	Filter Cartrid ge Model	Filter or Cartridge Replace Date	Initials								
MS-HE-CF3											
MS-HE-CF4											





# E. Sampling Schedule:

Annual water sampling and testing of the filtered water at each filtered bottle-filling station and filtered faucet is required by the CDWAA. Proper sampling procedures must be followed. Sampling instructions can be found in the Appendix. Provide all results to EGLE, parents and guardians, staff, and the public upon request.

Results that are greater than 5 ppb (0.005 mg/L or 5 ug/L) SHALL be submitted to EGLE within 30 days of facility receipt of the results to the EGLE School and Child Care Water email <a href="mailto:EGLE-DWEHD-FilterFirst@michigan.gov">EGLE-DWEHD-FilterFirst@michigan.gov</a> and reported to families. Repeat results that are 1-5 ppb (0.001-0.005 mg/L or 1-5 ug/L) SHALL also be submitted to EGLE along with the make/model of filter and/or filter bottle-filling station. Check the result box for the unit reported by the laboratory.

**Table 6: Annual Sampling Schedule** 

Number	Fixture ID Cod	Date Sampled	Sample Result ☐ mg/L or ☐ ug/L	Repeat Sample Date (if needed)	Repeat Result mg/L or ug/L	
1	MS-LH	-BF-WC				
2	MS-LH	-BF-WC				
3	MS-136	MS-136-WC-BF				
4	MS-CAF	É-WC-BF				
5	MS-FH	-BF-WC				
6	MS-	TL-TL				
7	MS-K	MS-KIT-KF				
8	MS-NI	MS-NUR-WC				
9	MS-BRK-WC					





Number	Fixture ID Code	Date Sampled	Sample Result mg/L or ug/L	Repeat Sample Date (if needed)	Repeat Result mg/L or ug/L
10	MS-HE-CF1				
11	MS-HE-CF2				
12	MS-HE-CF3				
13	MS-HE-CF4				





Number	Fixture ID Code	Date Sampled	Sample Result ☐ mg/L or ☐ ug/L	Repeat Sample Date (if needed)	Repeat Result I mg/L or ug/L





# Appendix A: Summary of the Clean Drinking Water Access Act (2023 PA 154)

These are the main regulatory elements of the CDWAA. You can read the Act in its entirety at Michigan.gov/FilterFirst.

### 1. Drinking Water Management Plan (DWMP)

- A. Within 15 months after the effective date of this act (by January 24, 2025), each school shall develop a drinking water management plan. The DWMP shall:
  - i. Be available upon request to EGLE, staff, parents/guardians, and public.
  - ii. Be reviewed and updated as needed, at least once every 5 years.
  - iii. Specify location of all water outlets used for human consumption.
    - 1. Specify location of filtered bottle-filling station (1/100 occupants)
    - 2. Specify location of filtered faucets.
  - iv. Specify location of all water outlets not used for consumption.
  - v. Specify location of water outlets that are shut off or rendered permanently inoperable.
  - vi. Develop a schedule for the regular replacement of the filter/filter cartridges for each filtered bottle-filling station and filtered faucet.
  - vii. Develop a schedule for sampling and testing of the filtered bottle-filling stations and filtered faucets for lead.

# 2. Testing for Lead

- A. Every filtered water outlet shall be sampled (through the filter) for lead once a year starting from the date filters have been installed and tested at a laboratory certified to analyze for lead.
- B. Laboratory test results shall be available upon request and recommend retaining by the school/district for at least 10 years.
- C. The following actions are to be taken upon review of the annual test results:
  - i. Test results not detecting lead (0 mg/L or 0 ug/L):
    - 1. Record and file the results.
    - 2. Share upon request.
  - ii. Test results detecting lead 1-5 ppb (0.001 0.005 mg/L or 1-5 ug/L):
    - 1. Immediately check status of filter(s).
    - 2. Replace filter/cartridge if status light is yellow or red.



- 3. Ensure the filter is properly installed.
- 4. Resample and retest.
- 5. If re-test result is 1-5 ppb (0.001 0.005 mg/L or 1-5 ug/L):
  - a. Send copy of result and the make/model of filter to EGLE.
  - b. Consult with EGLE or filter manufacturer.
- iii. Test results detecting more than 5 ppb (>0.005 mg/L or 5 ug/L):
  - 1. Immediately shut off or render the water outlet inoperable.
  - 2. Post a conspicuous sign near the outlet stating it is inoperable because of high lead concentration. Maintain the sign until actions have been taken to reduce the risk.
  - 3. Replace the filter/cartridge.
  - 4. Resample and retest the filtered water.
  - 5. Return the outlet to service if re-test result is not more than 5 ppb of lead.
    - a. If result is 1-5 ppb, follow 2cii above.
    - b. If result is >5 ppb, complete all the following:
      - i. Within 30 days after receiving the test results:
        - 1) Send a copy of test result(s) to EGLE.
        - 2) Send a notice to staff and parents/guardians that includes the amount of lead found in the water and information provided by EGLE on the health effects of lead exposure and ways to reduce childhood lead exposure.
      - ii. Develop a remediation plan in consultation with EGLE. The drinking water management plan must be updated to incorporate the remediation plan.

#### 3. By the end of the 2025-2026 School Year, each school shall:

- A. Have filters on all consumptive fixtures.
- B. Install all filtered bottle-filling stations (1 station per 100 occupants).
- C. Shut off or render permanently inoperable any water outlet providing water for human consumption that is not a filtered bottle-filling station or filtered faucet.
- D. Not install a drinking fountain unless it is a filtered bottle-filling station with a filter status light.
- E. Submit annually a certification of compliance to EGLE that certifies that the school has complied with the requirements of this act (on a form and in a manner prescribed by EGLE).



# **Appendix B: Water Sampling Guidance & Instructions**

- The CDWAA requires routine sampling at all filtered fixtures every year. Sampling
  begins as soon as filters are installed to check the functionality of the device and
  annually thereafter. To ensure sample results represent typical daily use during the
  school year, do not collect the routine annual sample immediately after replacing the
  filter cartridge.
- 2. Develop a unique <u>Fixture Identification Code</u> for each consumptive fixture per instructions on pages 7-8 above.
- 3. Obtain 250 ml wide-mouth sample bottles from the laboratory that will be testing the sample(s).
- 4. Prevent water use in the building for at least 8 hours prior to sample collection.
  - a. Notify all school staff and building users (external groups)
  - b. Post signs or bag fixtures, lock building, lock rooms.
  - c. Do not allow water use during sample collection. That includes flushing toilets, handwashing, and cleaning.
  - d. Do not collect samples or send them to the laboratory if water has been used.
- 5. Collect the **first draw** of filtered water in a 250 mL sample bottle.
  - a. Do not let the water run before collection.
  - b. Record information and complete all necessary forms:
    - i. Laboratory chain-of-custody form
    - ii. Drinking Water Management Plan (Table 6: Annual Sampling Schedule)
  - c. Each filtered fixture may be sampled on the same day.
- Samples must be delivered to a drinking water laboratory certified for lead and copper testing for the approved EPA method. A list of certified labs can be found at: <u>Lead-Copper-Certifications.pdf (michigan.gov)</u>.
  - a. Get the samples to the laboratory as soon as possible. May be mailed or hand delivered.
  - b. Samples must be received by the laboratory within 14 days of sample collection.

Some labs report the test results in milligrams per liter (mg/L) and some in micrograms per liter (ug/L). Make sure to check the appropriate unit of measure reported by the lab in Table 6 (Annual Sampling Schedule).



Immediate action is required by law if the test result is greater than 5 ug/L (5 ppb) or 0.005 mg/L (0.005 ppm). **Note:** 5 ug/L is the same as 5 parts per billion (5 ppb).

Results greater than 5 ppb or 0.005 ppm SHALL be submitted EGLE **within 30 day**s of facility receipt of the results and notice provided to families, staff, and students.



## **Annual Sampling and Testing Result Actions** Results **Results** Results **1-5** ppb >5 ppb ND\* Shut off or render fixture Check filter, Record & File inoperable, Post sign, Replace filter Replace as needed, cartridge Resample **Share upon request** Resample Resample Result Result 1-Result ND 5 ppb >5 ppb Within 30 days, send results and notice Record, File, Share upon Send results and make/model of to families and EGLE. request. Original >5 ppb filter to EGLE, Original >5 ppb fixture returned to service Develop remediation plan. fixture returned to service Keep fixture out of service and posted



\*ND = Not Detected