

**Village of Liberty Center**  
**Drinking Water Consumer Confidence Report**  
**For 2023**  
**PWS#3500603**

The Village of Liberty Center has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included with this report is general health information, water quality test results, and how to participate in decisions concerning your drinking water and water system contacts. This report, mandated by the U.S. Environmental Protection Agency covers all required testing results between January 1 and December 31, 2023.

**PUBLIC PARTICIPATION INFORMATION**

Public participation and comment are encouraged at regular meetings of the Board of Public Affairs which meet the second Tuesday of every month at 7:00 p.m. at the Municipal Building located at 110 East St.

**LICENSE TO OPERATE**

Liberty Center has a current, unconditional license to operate our water system.

**WHERE DOES MY WATER COME FROM?**

On August 15, 2023, the Village of Liberty Center switched water suppliers and began purchasing water from the Northwestern Water & Sewer District- Weston who purchases water from the City of Bowling Green. Information for both suppliers that the Village of Liberty Center purchased water from in 2023 have been included in this report.

The Napoleon Water Treatment Plant has an abundant water supply from 2 sources. The Napoleon Water Plant draws from the Maumee River daily. Their second source is the Wauseon Reservoir. They pump daily, weather permitting to the reservoir. In 2023 Napoleon pumped 523 million gallons of raw water to the Wauseon Reservoir. The flow can be reversed and Napoleon can flow back when there are water quality issues in the river, such as non-point agricultural runoff. The City of Napoleon provided roughly 388 million gallons of clean drinking water in 2023. The City of Napoleon uses surface water drawn from an intake on the Maumee River.

The City of Bowling Green's water treatment plant obtains its water from the Maumee River. The system's treatment capacity is approximately 6.0 million gallons per day, but current average production is 4.8 million gallons per day. Water is pumped from the Maumee River to an up-ground reservoir. The City of Bowling Green's water treatment system consists of coagulation, lime softening, flocculation, sedimentation, stabilization, granular activated carbon (GAC) filtration, filtration, and fluoride.

**SOURCES OF DRINKING WATER CONTAMINATION**

The sources of drinking water both tap water and bottled water includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

**DEFINITIONS OF TERMS CONTAINED WITHIN THIS REPORT**

*Parts per million (ppm)* - One part substance per million parts water (or Milligrams per liter).

*Parts per billion (ppb)* - One part substance per billion parts water (or Micrograms per liter).

*Action Level (AL)* - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*Nephelometric Turbidity Unit (NTU)* - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

*Maximum Residual Disinfectant Level Goal(MRDLG)*- The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

*Treatment Technique (TT)* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Maximum Contaminant Level* – The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

*Maximum Contaminant Level Goal* – The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

*Initial Distribution System Evaluation (IDSE)*

*Not Applicable (NA)*

*Total Coliform Bacteria (TC)* - Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

*Maximum Residual Disinfectant Level (MRDL)* - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

*The "<" Symbol*- A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

*TOC*- Total Organic Carbon

*Contact Time (CT)* - means the mathematical product of a "residual disinfectant concentration" (C), which is determined before or at the first customer, and the corresponding "disinfectant contact time" (T).

*Microcystins* – Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.

*Cyanobacteria* – Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins, which at sufficiently high concentrations can pose a risk to public health.

*Cyanotoxin* – Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins, and skin toxins. Also, sometimes referred to as "algal toxin".

**LEAD**

Lead in Home Plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Liberty Center is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead). Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing.

**NITRATE**

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask for advice from your health care provider.

**SAMPLING RESULTS**

During the past year the City of Napoleon has taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less that once per year because concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken. The table also includes results from additional tests that the Village of Liberty Center has taken and the results for the City of Bowling Green.

**TOTAL TRIHALOMETHANE**

Under the stage 2 disinfectants/disinfection Byproducts Rule (D/DBR), our public water system was required by U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution systems with elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under stage 2 DBPR, beginning in 2012. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloaetic Acids (HAA5). U.S. EPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both TTHMs and HAA5s.

**TOTAL COLIFORM RULE**

All water systems were required to begin compliance with a new rule, the Revised Total Coliform Rule, April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminate level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the Public Water System (PWS).

The value reported under Amount Detected for TOC is the lowest ratio between percentages of TOC actually removed to the percentage of TOC required to be removed. A value greater than (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one indicates a violation of the TOC removal requirements.

**TURBIDITY**

Turbidity is a measure of the cloudiness of the water and is an indication of the effectiveness of the filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time.

**THE VILLAGE OF LIBERTY CENTER NOTICES OF VIOLATION**

The Village of Liberty Center's Public Water system did not receive any violations for the year 2023.

**WHO NEEDS TO TAKE SPECIAL PRECAUTIONS?**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infection. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

**SOURCE WATER INFORMATION**

The Village of Liberty Center received its drinking water from The City of Napoleon system until the Village of Liberty Center switched suppliers on August 15, 2023 to the Northwestern Water & Sewer District- Weston who purchases their water from the City of Bowling Green. At the connection point the Village maintains booster pumps and chlorination and aeration facilities. The City of Napoleon uses surface water drawn from an intake on the Maumee River. The City of Bowling Green pumps the water from the Maumee River to an up-ground reservoir. For the purposes of

source water assessments, in Ohio all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens, which may rapidly arrive at the public drinking water intake with little warning or time to prepare. The City of Napoleon's drinking water source protection area contains potential contaminant sources such as agriculture, septic systems, oil and gas production activities, combined sewer overflows, wastewater treatment discharges, commercial and industrial sources, roadways, and railways. The City of Bowling Green's drinking water source protection area is susceptible to runoff from agriculture, industrial storm water, gas stations, home construction, and feed lots; waste water treatment discharges, airports, cemeteries, auto repair shops, landfills, above ground storage tanks, railroads, roadways, and oil and gas wells.

The City of Napoleon's public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. Also, while the source water for the City of Bowling Green Public Water System is considered susceptible to contamination, historically, the City of Bowling Green Public Water System has effectively treated this source water to meet drinking water quality standards. The potential for water quality impacts can be further decreased by implementing measures to protect the Maumee River. More detailed information is provided in the City of Napoleon and the City of Bowling Green's Drinking Water Source Water Assessment report, which can be obtained by calling the Village of Liberty Center Water Department.

**RED WATER/TASTE AND ODOR ISSUES**

From time to time, rust from the inside of old iron water mains or from your plumbing may be dislodged by high flow, this can lead to a red color in drinking water. In addition, during certain times of year, taste and odor problems may occur due mainly to algae in the raw water supply. Napoleon's Water Treatment Plant is working hard to control and eliminate these problems from their water. If you have questions or concerns about your water, contact The Village of Liberty Center's Water Department at 419-533-3321.

**PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)**

In 2020, the City of Napoleon was sampled as part of the State of Ohio's Drinking Water Per- and Polyfluoroalkyl Substances (PFAS) Sampling Initiative. Six PFAS compounds were sampled, and none were detected in the finished drinking water. For more information about PFAS, please visit [pfas.ohio.gov](http://pfas.ohio.gov).

***All Liberty Center resident's must provide contact information to be added to our emergency notification system. By providing your contact information, you will be notified if there is a water emergency. If we do not have your contact information, we cannot contact you if there is a water emergency.***

**Village of Liberty Center**  
**Water Department**  
**(419) 533-5901**  
**Billing (419)533-3321**

Test Results from the City of Napoleon								
Regulated Substance (unit of measure)	MCLG (MRDLG)	MCL (MRDL)	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contaminants	
<b>Microbiological Contaminants</b>								
Turbidity (NTU)	NA	TT	0.12	0.03 – 0.12	NO	2023	Soil Runoff	
Turbidity (Lowest Monthly % samples meeting limit)	NA	TT	100%	NA	NO	2023	Soil Runoff	
Total Organic Carbon (TOC)(ppm)	NA	TT	3.07	2.5-3.6	NO	2023	Naturally present in environment	
Microcystin (ppb)	*	NA	0%	0%	NO	2023	Produced by some naturally occurring cyanobacteria (Blue-Green Algae)	
*0.3 AL for children and sensitive populations, 1.6 for children 6 and older as well as adults.								
<b>Inorganic Contaminants</b>								
Fluoride (ppm)	4	4	1.17	0.83-1.17	NO	2023	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	
Nitrate (ppm)	10	10	5.91	0.18-5.91	NO	2023	Runoff from fertilizer; leaching from septic tanks, sewage; Erosion of natural deposits.	
Barium (ppm)	2	2	0.023	0-0.023	NO	2023	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	
<b>Synthetic Organic Contaminants including Pesticides &amp; Herbicides</b>								
Atrazine (ppb)	3	3	.34	0-.34	NO	2023	Runoff from herbicide used on row crops.	
<b>Additional Test Results from the Village of Liberty Center</b>								
<b>Residual Disinfectants/Bacteriological</b>								
Total Chlorine (ppm)	MRDL=4	MRDLG=4	1.204167	0.9-1.4	NO	2023	Water additive used to control microbes.	
Total Coliform Bacteria (TC)	0	1	0	0	NO	2023	Naturally present in environment	
<b>Volatile Organic Contaminants</b>								
Total Trihalomethanes(ppb) Stage 3-Site 1 & 2 Co Rd 424 & Co Rd T DS201& DS202 (ppb)	NA	80	55.70	29.70-87.9	NO	2023	By-product of drinking water disinfection.	
Total Haloacetic Acids (ppb) Stage 3-Site 1 & 2 Co Rd 424 & Co Rd T DS201 & DS202(ppb)	NA	60	19.15	13.9-23.8	NO	2023	By-product of drinking water disinfection.	
<b>Lead and Copper</b>								
Lead (ppb)	MCLG	MCL	Individual Results over the AL	Level Found	Range of Detection	Violation	Year Sampled	Typical Source of Contaminants
Lead (ppb)	0	AL 15	60.7	1.64	0- 60.7	NO	2023	Corrosion of household plumbing; Erosion of natural deposits.
1 sample site out of 12 sites sampled was above the AL of 15 ppb. The site was retested and was below the AL of 15 ppb.								
Copper (ppm)	1.3	AL 1.3	N/A	0.055	0-0.064	NO	2023	Corrosion of household plumbing; Erosion of natural deposits.
No sample sites out of 12 sites sampled were above the AL of 1.3 ppm.								

Test Results from the City of Bowling Green							
Regulated Substance (unit of measure)	MCLG (MRDLG)	MCL (MRDL)	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contaminants
<b>Microbiological Contaminants</b>							
Turbidity (NTU)	NA	TT	0.14	0.02 – 0.14	NO	2023	Soil Runoff
Turbidity (Lowest Monthly % samples meeting limit)	NA	TT	100%	0-100%	NO	2023	Soil Runoff
Total Organic Carbon (TOC)(ppm)	NA	TT	2.9	2.5-3.5	NO	2023	Naturally present in environment
<b>Inorganic Contaminants</b>							
Fluoride (ppm)	4	4	1.02	0.91-1.15	NO	2023	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm)	10	10	4.8	0.4-4.8	NO	2023	Runoff from fertilizer; leaching from septic tanks, sewage; Erosion of natural deposits.
Barium (ppm)	2	2	0.01	NA	NO	2023	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

**If you are a Critical Water User and may suffer health effects or other detrimental consequences if a continuous supply of water is not supplied, please let our office know and also provide documentation from your medical provider. Once we have written documentation you will be added to our Critical Water User list. Please be aware that being on this list is not a guarantee of notification, as emergencies may occur without warning. Notification will be issued using our Emergency Notification System by either email, text, or voicemail.**

\*\*\*Much of the verbiage here within is mandatory language provided by the Ohio EPA\*\*\*