



We are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2024. Since 1955, Clermont County has been dedicated to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Questions concerning the Clermont County water system may be directed to Tim Neyer at (513) 732 – 7945.

On October 9, 2024, the Batavia Village Public Water System (PWS 1300011) was combined into the Clermont County Public Water System. This report includes information for both water systems. Information that applies to each system individually is indicated as to which system the information applies. Since now Batavia Public Water System is part of the Clermont County Public Water System, future reports will not indicate Batavia Village as a separate system.

### **Source Water Description**

The Clermont County Water System operates three water treatment plants that pump into a common distribution system of pipes serving our customers. The Miami, Goshen, Stonelick (MGS) plant, near Miami, draws from wells in the Little Miami River Aquifer. The Pierce, Union, Batavia (PUB) plant is near New Palestine, its wells draw from the Ohio River Valley Aquifer. The Bob McEwen Water Treatment Plant (BMW) is located in Batavia Township and draws surface water from Harsha Lake. Surface water is more susceptible to contamination than groundwater; therefore, frequent and extensive testing of the raw water is conducted. Chemical and bacteriological testing, as well as an evaluation of the biological organisms living upstream of the lake, is used to determine raw water quality and identify areas of concern. Information on the watershed collected by Clermont County is available from the Source Water Protection Coordinator who may be contacted at (531) 732-7970.

### **Source Water Assessment**

In 2004 the Ohio EPA performed a source water assessment for the MGS wellfield and designated it as highly susceptible to contamination. This is based in part on the geology of the aquifer, which is shallow and has little or no impermeable materials above it. Another factor is the presence of potential sources of pollution in the area. The Ohio EPA also noted the presence of nitrates in the water, which suggests human influences in the aquifer. However, the water continues to meet drinking water standards. It is important to understand that this susceptibility rating does not imply poor water quality, only the system's potential to become contaminated within the assessment area. The wellfield is monitored for contamination and cared for under an Ohio EPA-endorsed Wellhead Protection Plan. To learn more, call Mike Long at (513) 553-3338.

A susceptibility analysis of the PUB water sources by the Ohio EPA has determined that this aquifer has a high susceptibility for contamination based on a relatively thin layer of low permeable material overlying it and its relatively shallow depth. Potential pollution sources in the area and a possible hydraulic connection to the Ohio River also contribute to this assessment. However, the Ohio EPA agrees that there is no evidence of existing chemical contaminants. These wellfields are also monitored for contamination and cared for under an Ohio EPA-endorsed Wellhead Protection Plan. To learn more, call Mike Long at (513) 553-3338.

The Ohio EPA completed a source water assessment for BMW in 2004. The protection area around Harsha Lake and the upstream portions of the East Fork of the Little Miami River includes a number of commercial and industrial facilities, but the greater concerns are runoff from agricultural fields, the potential for spills at road and rail crossings, and residential septic systems in the watershed. To learn more, contact Ryan Hancock at (513) 732-5386.

Sources identified in the Potential Pollution Source Inventory include Walter C. Beckjord Generating Station, the PUB Water Treatment Plant, on-site wastewater treatment systems, underground and aboveground fuel storage tanks, and the Ohio River, Ten Mile Creek, and transportation routes. The susceptibility ranking for all three plants was high priority. It is important to understand that this susceptibility rating does not imply poor water quality, only the system's potential to become contaminated within the assessment area. Customers may get a copy of the assessment by calling Tim Neyer at (513) 732-7945.

### **Emergency Water Sources**

The Clermont County Public Water System also has emergency connections with three neighboring public water systems. Two connections are with Greater Cincinnati Water Works, two connections with Tate Monroe Water Association and three connections with Western Water Company. During 2024 none of the connections were used to supply water to the Clermont County Public Water system.

### **What are sources of contamination to drinking water?**

The sources of drinking water (both tap water and bottled water) include 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 Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

### **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).

### **Ensuring Quality**

Clermont County requires all treatment plant operations personnel to become certified as professional operators by the Ohio EPA as a condition of employment. As professional operators, Clermont County treatment plant personnel have demonstrated their competence concerning the treatment of public drinking water to the Ohio EPA. Professional certification is one of the ways Clermont County ensures you receive high-quality water for your personal and business use.

The EPA requires regular sampling to ensure drinking water safety. The Clermont County conducted sampling for a variety of contaminants during 2024. Most contaminants tested for were undetected. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

## Reporting Violation

Clermont County incorrectly reported results for copper monitoring conducted during 2023 on the 2023 Annual Water Quality Report. The 90th Percentile reported in the CCR for copper was incorrect. The 90th percentile for copper should have been 0.595 ppm, not 0.622 ppm. Also, the statement regarding the number of samples over the action level for copper should have indicated 1 sample over the action level, not 2. The table of contaminants for the 2024 Annual Water Quality Report has been updated with the corrected information to resolve the violation. Clermont County will continue to thoroughly review the information provided to the public to help ensure correct information is presented in the future.

## Detected Contaminants

The following table lists contaminant testing results for the Clermont County Public Water System. Remember that a detection does not mean that the water is unsafe to drink. Our goal is to keep all contaminants below EPA recommended levels. Contaminant titles including **Clermont County** apply to the Clermont County Public Water System only. Contaminants including **Batavia Village**, apply to only the Batavia Village Public Water System Only. If no system is identified, the information applies to both public water systems.

**TABLE OF DETECTED CONTAMINANTS**

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Disinfectant and Disinfectant By-Products</b>							
Total Chlorine (ppm) <b>Clermont County</b>	MRDLG = 4	MRDL = 4	1.2	1.1-1.32	No	2024	Water additive used to control microbes
Total Chlorine (ppm) <b>Batavia Village</b>	MRDLG = 4	MRDL = 4	1.61	1.3 - 1.95	No	2024	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb) <b>Clermont County</b>	N/A	60	24.7	ND-42.2	No	2024	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb) <b>Batavia Village</b>	N/A	60	22	5.8 - 41.5	No	2024	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb) <b>Clermont County</b>	N/A	80	77	12.7-116	No	2024	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb) <b>Batavia Village</b>	N/A	80	61.6	21.0 - 91.1	No	2024	By-product of drinking water disinfection
<b>Inorganic Contaminants</b>							
Turbidity (NTU)	TT	N/A	0.29	0.018-0.29	No	2024	Soil runoff
Total Organic Carbon	TT	N/A	1.33	1.29-1.61	No	2024	Naturally present in the environment
Barium (ppm)	2	2	0.035	0.023-0.046	No	2024	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	1	0.82 - 1.30	No	2024	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm)	10	10	1.31	ND-1.31	No	2024	Run off from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Lead and Copper</b>							
Contaminants (units)	Action Level (AL)	MCLG	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants
Lead (ppb), <b>Clermont County</b>	15 ppb	0 ppb	N/A	2.1	No	2023	Corrosion of household plumbing systems; erosion of natural deposits
	0 out of 52 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Lead (ppb), <b>Batavia Village</b>	15 ppb	0 ppb	N/A	0.6	No	2023	Corrosion of household plumbing systems; erosion of natural deposits
	0 out of 10 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm), <b>Clermont County</b>	1.3 ppm	1.3 ppm	1.51 (1)	0.595 (2)	No	2023	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems
	1 out of 52 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						
Copper (ppm), <b>Batavia Village</b>	1.3 ppm	1.3 ppm	N/A	0.101	No	2023	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems
	0 out of 10 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						

(1) Information reported on the 2023 Clermont County Consumer Confidence Report incorrectly listed 2 locations above the Action Limit. Only the currently listed result should have been reported.

(2) Information reported on the 2023 Clermont County Consumer Confidence Report incorrectly reported the 90th Percentile value as 0.622 rather than 0.595.

## Turbidity

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time. As reported above, the Clermont County Public Water System's highest recorded turbidity result for 2024 was 0.29 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.

## Lead Information

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. Clermont County Water 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 wish to 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 <http://www.epa.gov/safewater/lead>.

Per the Lead and Copper Rules, Public Water Systems are required to develop and maintain a Service Line Inventory. A service line is the underground pipe that supplies your home or building with water. To view the Service Line Inventory, which lists the material type(s) for your location, visit the following web link [www.wrd.clermontcountyohio.gov/lead-in-home-plumbing/](http://www.wrd.clermontcountyohio.gov/lead-in-home-plumbing/)

## Copper

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

## Detected Unregulated Contaminants

Unregulated contaminants are those for which U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of these contaminants in drinking water and whether future regulation is warranted. In 2024 Clermont County participated in the fifth round of the Unregulated Contaminant Monitoring Rule (UCMR 5). For a copy of the results please call Tim Neyer at (513) 732-7945.

### Table of UMCRC5 Contaminants

Contaminant	MRL	Average	Range	Sample Year
Perfluorooctanesulfonic acid (PFOS), (PPB)	0.0040	0.0025	ND - 0.0101	2024
Perfluoropentanoic acid (PFPeA), (PPB)	0.0030	0.0008	ND - 0.0033	2024

PFAS: Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing.

### License to Operate (LTO) Status

- In 2024 Clermont County had an unconditioned license to operate our water system.

### Public Participation and Contact Information

While the Water Resources Department does not hold regular meetings open to the public, customers are encouraged to participate in discussions about our drinking water. The Clermont County Board of County Commissioners hold sessions at 10:00 a.m. on most Mondays and Wednesdays in the third-floor session room of the Clermont County Administration Building, located at 101 East Main Street in Batavia. Information related to meeting dates and times can be found by visiting the county website, [www.clermontcountyohio.gov](http://www.clermontcountyohio.gov), or calling (513) 732-7300.

### Definitions of some terms contained within this report

- **Maximum Contaminant Level Goal (MCLG):** 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.

- **Maximum Contaminant Level (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **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.
- **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.
- **Minimum Reportable Limit (MRL):** The lowest concentration a laboratory must report for the contaminant analysis.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Parts per Million (ppm) or Milligrams per Liter (mg/L)** are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
- **Parts per Billion (ppb) or Micrograms per Liter (µg/L)** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- **ND** used when laboratory analysis for a contaminant is below detection level

## Some Additional and Useful Information

### Hardness

Customers in Stonelick and Batavia Townships and the eastern portion of Goshen Township have a hardness of roughly 7 grains per gallon. The remainder of our service area has approximately 10.5 grains per gallon.

### **Pink Stains in your bathroom fixtures?**

The pink stains often found at times in your bathroom sinks or showers is caused by a bacterium *Serratia marcescens*. *Serratia* is common and is distributed in soil, animals, insects, and also humans. *Serratia* does not survive in chlorinated water. Your bathroom provides a warm and moist environment for the bacteria to thrive. To minimize the growth of the bacteria, try the following.

- Continuously wipe and dry areas that may be affected by bacteria growth
- Utilize chlorine based solutions for cleaning and sanitizing
- Clean toilets with disinfectant cleaners

### **How much water does the Clermont County Public Water System produce?**

Production of treated water varies throughout the year and depends primarily on customer demand. The water treatment plants in the Clermont County Public Water System supplied between 10,700,000 and 23,692,000 gallons of water per day during 2024. On average in 2024, Clermont County Public Water System demand was 15,448,000 gallons of water delivered to customer homes and businesses.