

ANNUAL

WATER QUALITY REPORT

Water testing performed in 2008



Presented By:

CLERMONT COUNTY WATER



PWS ID#: 1302212

Introduction

This brochure is a summary of the quality of the water we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) standards. We are providing you with the information because we want you to be informed. We know that you count on us for a safe and reliable supply of water every day, and we are dedicated to providing the highest quality of service to you. If this report was mailed to you as owner of a property whose occupants drink Clermont County Water, please forward it to those residents.

Questions about the water system, which has been in operation since 1955, may be directed to Mark Day at (513) 732-7945.

Public Meetings

The Clermont County Board of County Commissioners owns and operates the Clermont County Water System. Information relative to meeting dates and times can be found by visiting the County Web site, www.co.clermont.oh.us, or by calling (513) 732-7300.

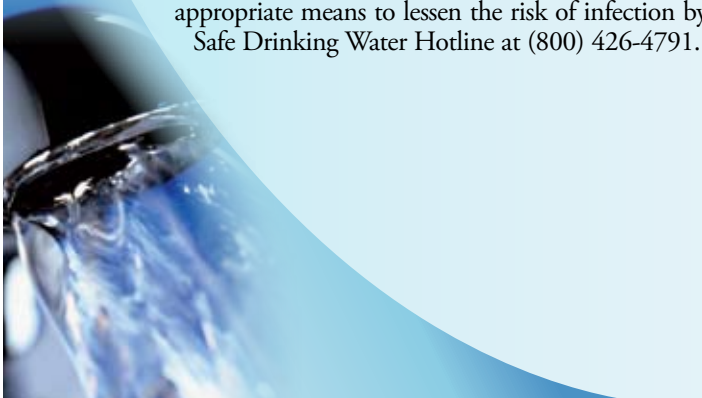


Measuring Drinking Water Quality

Clermont County Water System ensures that your water is safe through regular monitoring and testing of water quality. Our own, as well as other, independent state-certified testing laboratories conduct these tests. This report shows a comprehensive summary of the laboratory test results for the contaminants we have detected in the drinking water in the most recent testing done in accordance with the drinking water regulations. Responsibility for maintaining water quality resides with our staff of certified water treatment plant operators, licensed by the Ohio Environmental Protection Agency (OEPA).

The Safe Drinking Water Act directs the state, along with the Environmental Protection Agency (EPA), to establish and enforce minimum drinking water standards. These standards set sampling frequency and concentration limits on certain biological, radioactive, organic, and inorganic substances sometimes found in drinking water. The limits are called Maximum Contaminant Levels, or MCLs.

The Maximum Contaminant Levels (MCLs) are set to prevent health problems for people throughout their lifetime. Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.



Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you can save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Hardness

Water hardness is not regulated and does not appear on the table. Each of our three water treatment plants produces waters of differing hardness, which mix in the common piping system. In general, if you live in Pierce or Union Township, you receive water with a hardness of 11 grains per gallon (180 ppm). In Batavia, Stonelick, and Goshen Townships, the water has 7 grains per gallon (120 ppm) of hardness. In Miami Township, blending of these two waters is possible, but the softer water is more likely. In northern Miami Township, hardness varies from 7 grains per gallon in the winter (October through April) to 14 grains per gallon (240 ppm) in summer (May through September).

If you have questions about these tables, call Eric Heiser at (513) 732-5386.

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 MGS plant, located near Miamiville, draws from wells in the Little Miami River Aquifer. In 2004, the Ohio EPA performed a source water assessment for the MGS well field 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 atop it. Another factor is the presence of potential sources of pollution in the area. The EPA also notes the presence of nitrates in the water, which suggests man-made influence in the aquifer. However, the water continues to meet drinking water standards.

The PUB plant is near New Palestine, where its wells draw from the Ohio River Valley Aquifer. A draft susceptibility analysis from the Ohio EPA has determined that this aquifer has a high susceptibility for contamination, based on a relatively thin layer of low permeability material overlying the aquifer and the relatively shallow depth of the aquifer. Potential pollution sources in the area and a possible hydraulic connection to the Ohio River also contribute to this assessment. However, the EPA agrees that there is no evidence of existing chemical contaminants. These well fields are monitored for contamination and cared for under the Wellhead Protection Plan. Persons who wish to learn more may call Mark Day at (513) 732-7945.

The Bob McEwen Water Treatment Plant (BMW) is located near Batavia and draws surface water from Harsha Lake, which was created by constructing a dam across the East Fork Little Miami River. Surface water is more susceptible to contamination than groundwater, so extensive testing of the raw water is conducted frequently. Chemical and bacteriological testing, as well as evaluation of the biological organisms living upstream of the lake, is used to determine raw water quality and identify areas of concern. 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 Little Miami River include a number of commercial and industrial facilities, but the greater concern is runoff from agricultural fields, the potential for spills at road and rail crossings, and residential septic systems in the watershed. Persons who wish to learn more may contact Eric Heiser at (513) 732-5386. Additional information on the watershed collected by Clermont County is available from the Office of Environmental Quality (OEQ) at (513) 732-7894 or the Web site <http://www.oeq.net>. After treatment, which includes Granular Activated Carbon filtration, water from the lake meets all required drinking water standards.

Lead and Drinking Water

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. We are 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 or at www.epa.gov/safewater/lead.

Lead and copper testing was conducted in 2008 by Clermont County Water in 52 older homes which were identified as being at risk for having higher levels of these contaminants. Some samples contained copper (and in one case lead) in the water that had sat in those homes' water lines overnight, but all were at concentrations below the "action levels" set by the EPA.

About Our Violation

A test for nitrate is required each month for the Bob McEwen Water Treatment Plant. In August of 2008, Clermont County Water failed to have a nitrate test result, which is a monitoring violation. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. The Bob McEwen Water Treatment Plant has never had a nitrate result that exceeded the MCL in monthly tests since the plant has been in operation (since May 1995); however, because there is no result from August 2008, we cannot be sure of the level of nitrate in your drinking water at that time. We are currently double checking the laboratory paperwork with completed lab results to make certain that this mistake is not repeated.

Data Sheet and Supplemental Information

Turbidity is a measure of the clarity of the water. It is of concern as it may interfere with disinfection. In 2008, our performance for turbidity was better than required.

Tests were conducted for other contaminants, which were not detected, and therefore are not included in the table. Contaminants not detected include arsenic, which will soon be regulated by the Ohio EPA. Throughout 2008, neither Cryptosporidia nor Giardia was detected in monthly tests conducted by an outside lab on water from our lake intake. If you want to know if we have tested for a particular substance, please call us.

The state requires us to monitor for certain substances less than once per year because the 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.

REGULATED SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | MCLG [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|--|-----------------|---------------|-----------------|--------------------|-------------------|-----------|---|
| Chlorine (ppm) | 2008 | [4] | [4] | 0.92 | 0.1–2.0 | No | Water additive used to control microbes |
| Fluoride (ppm) | 2008 | 4 | 4 | 1.8 | 0.67–1.8 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Haloacetic Acids [HAA] (ppb) | 2008 | 60 | NA | 32.2 | 1.0–116.5 | No | By-product of drinking water disinfection |
| Nitrate (ppm) | 2008 | 10 | 10 | 1.98 | ND–1.98 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| TTHMs [Total Trihalomethanes] (ppb) | 2008 | 80 | NA | 43.2 | ND–97.5 | No | By-product of drinking water chlorination |
| Total Organic Carbon [TOC] ¹ (removal ratio) | 2008 | TT | NA | 1.45 | 1.34–2.26 | No | Naturally present in the environment |
| Turbidity ² (NTU) | 2008 | TT | NA | 0.996 | 0.042–0.996 | No | Soil runoff |
| Turbidity (Lowest monthly percent of samples meeting limit) | 2008 | TT | NA | 99.97 | NA | No | Soil runoff |

Tap water samples were collected for lead and copper analyses from sample sites throughout the community (Lead was not detected at the 90th percentile)

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AL | MCLG | AMOUNT DETECTED (90TH%TILE) | SITES ABOVE AL/TOTAL SITES | VIOLATION | TYPICAL SOURCE |
|--------------------------------|-----------------|-----|------|-----------------------------------|----------------------------------|-----------|--|
| Copper (ppm) | 2008 | 1.3 | 1.3 | 0.381 | 0/52 | No | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |

UNREGULATED SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AMOUNT DETECTED | RANGE LOW-HIGH | TYPICAL SOURCE |
|-----------------------------------|-----------------|--------------------|-------------------|---|
| Bromodichloromethane (ppb) | 2008 | 15.5 | 0.8–15.5 | By-product of drinking water chlorination |
| Bromoform (ppb) | 2008 | 7.54 | ND–7.54 | By-product of drinking water chlorination |
| Chloroform (ppb) | 2008 | 103 | ND–103 | By-product of drinking water chlorination |
| Dibromochloromethane (ppb) | 2008 | 15.4 | 0.55–15.4 | By-product of drinking water chlorination |

IDSE SAMPLING RESULTS³

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AMOUNT DETECTED | RANGE LOW-HIGH | TYPICAL SOURCE |
|---|-----------------|--------------------|-------------------|---|
| Haloacetic Acids [HAA]–IDSE Results (ppb) | 2008 | 29.05 | ND–50.2 | By-product of drinking water disinfection |
| TTHMs [Total Trihalomethanes]–IDSE Results (ppb) | 2008 | 72.02 | 2.6–95.2 | By-product of drinking water disinfection |

¹The value reported under Amount Detected for TOC is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one 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.

²Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

³Under the Stage 2 Disinfectants/Disinfection By-products Rule (D/DBPR), our public water system was required by the 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 system with elevated disinfection by-product concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning in 2012. Disinfection by-products are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection by-products are grouped into two categories: Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). The U.S. EPA sets standards for controlling the levels of disinfectants and disinfectant by-products in drinking water, including both TTHMs and HAA5s.

Definitions

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units):

Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.