

# 2018 DRINKING WATER CONSUMER CONFIDENCE REPORT

### Introduction

The Batavia Village Public Water System (PWS) has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

Effective Jan. 9, 2012, the Village of Batavia and the Clermont County Water Resources Department (CCWRD) entered into a three-year Operations and Maintenance contract for the water distribution system serving the village. The village and county supplanted the original three-year contract with a 10-year agreement on Sept. 24, 2014. During the 10-year agreement, Batavia is making capital improvements to village underground infrastructure. Clermont County will take ownership of the water and wastewater infrastructure and responsibility for operation and maintenance for the Village of Batavia at the agreement's end. CCWRD is to continue to meet or exceed all Ohio Environmental Protection Agency and American Water Works Association standards for potable water. All water system questions or concerns should now be directed to CCWRD, 4400 Haskell Lane, Batavia, telephone (513) 732-7970.

Water supplied from CCWRD met all U.S. EPA and Ohio water standards in 2018. The village water supply system relies on the Clermont County water system for contaminant removal and testing. Clermont County performs required tests to ensure that the system meets the water standards. For example, the county system must collect and analyze the water daily for the presence of chlorine, which protects the water from microbial contaminants. Semiannual flushing of water lines is one of the ways the operators maintain high quality water standards.

In the event of a water main break, the chlorine in the water destroys microbes that may enter the broken main. The county staff also tests for total coliform and E-coli bacteria each month. Coliform bacteria is not necessarily harmful, but its presence indicates the possibility of contamination by other microbes. The presence of E-coli discloses a definite contamination problem that can have serious health consequences. Batavia is also required to monitor for lead and copper, which occur primarily because of the corrosion of materials in the distribution system and in residents' home plumbing systems. This testing is conducted every three years.

In 2017 and 2018, the Batavia Village PWS replaced aging cast iron water mains with higher capacity lines, improving water pressures and available fire-fighting capacity. In conjunction with the water main improvements, Batavia installed a second supply connection to the Clermont County water supply and built a pressure-regulating chamber on State Route 222 to control flows in the system. With these improvements, the Village of Batavia has eliminated most 4" water mains and installed higher capacity mains for service quality and reliability. Clermont County and the Village of Batavia are negotiating to transfer all water operations to the county in 2019 and working to transfer sewer operations in before 2021.

## **Source Water Information**

The Batavia Village PWS receives its drinking water from the Clermont County Water Resources Department. 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 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 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. These wellfields are monitored for contamination and cared for under an Ohio-EPA endorsed Wellhead Protection Plan. To learn more, call Rick Fueston at (513) 553-4113.

The PUB plant is near New Palestine, where its wells draw from the Ohio River Valley Aquifer. A 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 in the water. These wellfields are monitored for contamination and cared for under an Ohio-EPA-endorsed Wellhead Protection Plan. To learn more, call Rick Fueston at (513) 553-4113.

The Bob McEwen Water Treatment Plant (BMW), located near Batavia, 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 includes 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. To learn more, call Brent Smith 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 on the Web site: http://www.oeq.net.

Potential pollution sources identified in the PPSI include; Walter C. Beckjord generating Station, the PUB Water Treatment Plant, onsite wastewater treatment systems, underground and above ground fuel storage tanks, the Ohio River, Ten Mile Creek, and

transportation routes (B&W 1998). The specific susceptibility rankings for all three plants were "high priority" rankings. Customers may get a copy of the assessment by calling Tim Neyer at (513)732-7945.

# 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, U.S. EPA 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. The U.S. EPA/CDC (Center 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 (1-800-426-4791) or http://water.epa.gov/drink/hotline.

# About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The Batavia Village PWS conducted sampling for total coliform; lead; copper; chlorine; disinfection byproducts; during 2018 Samples were collected for a total of six (6) different contaminants most of which were not detected in the Batavia Village PWS water supply. 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.

## **Monitoring & Reporting Violations & Enforcement Actions**

The Batavia Village PWS is required to take two total coliform bacteria samples each month of the year. During the November 2017 testing period one of the Batavia Village samples taken was not properly analyzed resulting in a violation of the Ohio Administrative Code (OAC) Rule 3745-81-51. The violation was inadequately reported in the 2017 Consumer Confidence Report (CCR) resulting in a violation on the CCR. The 2017 CCR has been updated to reflect important violation information. Please visit the Village of Batavia website at <a href="http://www.bataviavillage.org/utilities/docs/CCR%202017.pdf">http://www.bataviavillage.org/utilities/docs/CCR%202017.pdf</a> to review.

Also in the 2017, Batavia Village CCR mandatory contact information in the "A Word About Lead" section was inadvertently left out as well as Nitrate levels for the 2017 year resulting in a Violation of the CCR. Please see the lead section of this report for proper contact information. Nitrate levels can be found in the Table of Contaminants.

## **Table of Detected Contaminants.**

| Substance<br>(Unit of Measure)   | Year<br>Sampled | MCL<br>[MRDL] | MCLG<br>[MRDLG] | Amount<br>Detected | Range<br>Low-High | Violation | Typical Source  |
|--|-----------------|---------------|-----------------|--------------------|-------------------|-----------|---|
| (0 00 0000)  |                 |               |                 |                    |                   |           |   |
| <b>Barium</b> (ppm)<br>Clermont County Water<br>Resources  | 2018            | 2             | 2               | 0.36               | 0.027-0.036       | No        | Discharge of drilling wastes; Discharge<br>from metal refineries; Erosion of natural<br>deposits.                         |
| <b>Total Chlorine</b> (ppm)<br>Batavia Village   | 2018            | [4]           | [4]             | 1.45               | 0.5-2.2           | No        | Water additive used to control microbes   |
| <b>Fluoride</b> (ppm)<br>Clermont County Water<br>Resources  | 2018            | 4             | 4               | 1.0                | 0.56-1.57         | No        | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| <b>Haloacetic</b> Acids [HAA5]<br>(ppb)<br>Batavia Village   | 2018            | 60            | NA              | 19.84              | ND-38.6           | No        | By-product of drinking water disinfection   |
| <b>TTHMs</b> [Total<br>Trihalomethanes] (ppb)<br>Batavia Village                                   | 2018            | 80            | NA              | 41                 | 15.4-74.4         | No        | By-product of drinking water disinfection   |
| Nitrate(ppm)<br>Clermont County Water<br>Resources   | 2018            | 10            | 10              | 0.92               | 0.42-1.52         | No        | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.                              |
| Nitrate(ppm) Clermont County Water Resources   | 2018            | 1             | 1               | 0.1                | 0.1-0.1           | No        | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits                               |
| Total Organic Carbon [TOC] <sup>2</sup> Removal Ratio Clermont County Water Resources              | 2018            | TT            | NA              | 1.29               | 1.08-1.64         | No        | Naturally present in the environment  |
| <b>Turbidity</b> (NTU)<br>Clermont County Water<br>Resources                                       | 2018            | π             | NA              | 0.264              | 0.021-0.264       | No        | Soil runoff   |
| <b>Turbidity</b> (Lowest monthly percent of samples meeting limit) Clermont County Water Resources | 2018            | Π             | NA              | 100                | NA                | No        | Soil runoff   |

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

**Batavia Village Water Results** 

| Substance<br>(Unit of Measure)         | Year<br>Sampled | AL  | MCLG | Amount<br>Detected<br>(90th%tile) | Sites Above<br>AL/Total<br>Sites | Typical Source   |
|--|-----------------|-----|------|-----------------------------------|----------------------------------|--|
| <b>Copper</b> (ppm)<br>Batavia Village | 2017            | 1.3 | 1.3  | .114                              | 0/10                             | Corrosion of household plumbing systems; Erosion of natural deposits   |
| <b>Lead</b> (ppb)<br>Batavia Village   | 2017            | 15  | 0    | <5.0                              | 0/10                             | Corrosion of household plumbing<br>systems; Erosion of Natural deposit |

## **Secondary Substances**

Clermont County Water

| Clermont Cou | iity water |      |      |          |          |           |  |
|--------------|------------|------|------|----------|----------|-----------|--|
| Substance    | Year       | SMCL | MCLG | Amount   | Range    | Violation | Typical Source                         |
| (Unit of     | Sampled    |      |      | Detected | Low-High |           |  |
| Measure)     |            |      |      |          |          |           |  |
| Zinc (ppm)   | 2018       | 5    | N/A  | 0.010    | .010010  | No        | Runoff/leaching from natural deposits; |
|              |            |      |      |          |          |           | Industrial wastes                      |

<sup>1.</sup> Some people who drink water-containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central

nervous systems, and may have an increased risk of getting cancer.

2. The 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.

# **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.

### **Lead Educational 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. The Clermont County Water Resources Department 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 800-426-4791or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

# **License to Operate (LTO) Status Information**

"In 2018 The Batavia Village PWS had a current, unconditioned license to operate the Public Water System" PWS # OH1300011

# **Public Participation and Contact Information**

# How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings with the Batavia Village which meets on the first Monday of every Month at the Village office; 65 North Second Street Batavia, Ohio 45103 or call (513)732-2020 For more information on your drinking water contact Stephen L. Knipp (Clermont County Water Resources Department) at (513)732-7970.

### **Table 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.

**SMCL** (secondary maximum contaminant levels) These are non-mandatory water quality standards for 15 contaminants. They are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.

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

**LRAA** (Locational Running Average): The average of sample analytical results for samples taken at a particular monitoring location during the Previous four calendar quarters. Amount Detected values for TTHMs and HAA5s are reported as the highest LRAAs.

90<sup>th</sup> Percentile: The levels reported for lead and coper represent the 90<sup>th</sup> percentile of the total number of sites tested. The 90<sup>th</sup> percentile is equal to or greater than 90% of our lead and copper detections.

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.