



CITY OF BELLEFONTAINE

WATER DEPARTMENT

BELLEFONTAINE FACTS

The City of Bellefontaine Water Department serves approximately 13,500 people through 5,600 service connections and 83.5 miles of distribution lines.

The new water treatment plant was completed and put in service in 1998.

We have a current, unconditioned license to operate our water system.

PUBLIC PARTICIPATION

You can participate in decisions regarding your water by attending a City Council Meeting. The Council meets at 7:30 p.m. in Council Chambers on the second and fourth Tuesday of each month at the Municipal Building located at

135 N. Detroit St., Bellefontaine, OH. Additional questions can be directed to the **Mayor's Office** by calling

937-592-6807.

EPA SAFE DRINKING WATER HOTLINE

1-800-426-4791



The City of Bellefontaine is happy to present you this report to inform our valuable customers on the quality of their drinking water. This report includes details on where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information about your water supply, because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards. Our water source is groundwater and the well field is located at

1251 West Columbus Street, Bellefontaine

WATER TREATMENT
937-593-6121

BILLING QUESTIONS
937-592-3561

MAYOR'S OFFICE
937-592-6807

2018 ANNUAL WATER REPORT



IMMUNO COMPROMISED PERSONS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemo-therapy, 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 infections.

These people should seek advice about drinking water from their health care providers, EPA/CDC guidelines on appropriate means to lessen the risk of infections by cryptosporidium and other microbiological contaminants are available from the Safe Water Drinking Hotline.

1-800-426-4791

The City of Bellefontaine

routinely monitors for contaminants in your drinking water according to Federal and State laws. The table enclosed shows the results of our monitoring for the period of January 1st to December 31st, 2018. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily indicate that the 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 \(1-800-426-4791\).](#)

If you have questions regarding this report, please contact –

Tim E. Newland, Water Superintendent [at](#)

SOURCES OF CONTAMINATION

The sources of drinking water, both tap water and bottled water, include rivers, lakes, streams, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and other substances, 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 users; (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, 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.



LEAD WATER LINES

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 City of Bellefontaine 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 1-800-426-4791 or on the web at

<https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>



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

Parts per Million (ppm) or Milligrams per Liter (mg/L): are units of concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

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.

Parts per Billion (ppb) or Micrograms per Liter (mg/L): are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Picocuries per liter (pCi/L): picocuries per liter is a measure of the radioactivity in water.

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.



SUSCEPTIBILITY ANALYSIS

The aquifer that supplies drinking water to the City of Bellefontaine's West wellfield is highly susceptible to contamination. This determination was made because of the following reasons:

- Water quality results indicate impacts of volatile organic compounds.
- The carbonate aquifer has a relatively shallow depth to water, in most areas less than 30 feet below the ground surface.
- The topography is relatively flat, allowing for most of the recharge to infiltrate into the ground instead of running off.
- Potential contaminant sources exist within the protection area.

Water quality data collected to meet public water supply requirements provide a direct measurement for the presence of contamination in drinking water. Water quality data was evaluated using the drinking water compliance database available at the Ohio EPA. The Ohio EPA has a high confidence level in drinking water data collected since 1990. Samples collected at Bellefontaine of both raw and treated water between 1990 and 1998 resulted in detectable levels of the organic compounds.

Additional samples have been collected since 1998 at Bellefontaine's water supply and concentrations of organic compounds have not been detected. Bellefontaine is currently operating a treatment system to help ensure that volatile organic compounds remain at well below the maximum contaminant level to protect the health of the public.

Many potential sources of contamination have been identified in Bellefontaine's protection areas. Over half of the sources identified are commercial and industrial sources; the remainder are gravel pits and quarries, several cemeteries, major transportation routes, agricultural and residential sources (includes home fuel oil tanks and septic systems). More detailed information is available in the City's Wellhead Protection Report and Susceptibility Analysis, which can be obtained by calling 937-593-6121 or Ohio EPA 1-800-426-4791.

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| AMINANTS | SAMPLE YEAR | HIGHEST LEVEL DETECTED | RANGE OF LEVELS DETECTED | MCL GOAL | MCL FOUND | UNITS | VIOLATION | LIKELY SOURCE OF CONTAMINATION |
|---|-------------|--|-----------------------------|-----------------------|--------------------------|-------|-----------|---|
| Disinfectants and Disinfection By Products | | | | | | | | |
| Chlorine | 2017 | 0.81 | 0.78—1.03 | MRDLG = 4 | MRDL = 4 | Ppm | N | Water additive used to control microbes. |
| Acetic Acids (HAA5)* | 2015 | 3 | 0—6.4 | No goal for The total | 60 | Ppb | N | By-product of drinking water disinfection. |
| Trihalomethanes (THM) | 2015 | 25 | 22.5—27.3 | No goal for The total | 80 | Ppb | N | By-product of drinking water disinfection. |
| Inorganic Contaminants | | | | | | | | |
| Iron | 2015 | 0.132 | 0.132—0.132 | 2 | 2 | Ppm | N | Discharge of drilling wastes; Discharge from refineries; Erosion of natural deposits |
| Fluoride | 2017 | 0.87 | 0.42—1.43 | 4 | 4.0 | Ppm | N | Erosion of natural desposits; Water additive promotes strong teeth; Discharge from fertilizer aluminum factories. |
| Nitrate [measured as Nitrogen] | 2017 | 0.23 | 0.23—0.23 | 10 | 10 | Ppm | N | Runoff from fertilizer use; Leaching from septic sewage; Erosion of natural deposits |
| Lead-Copper | | 90th-Percentile | # of Samples Over AL | | Action Level (AL) | | | |
| Copper | 2015 | 0.869 0 out of 20 samples exceeded the action level of 1350 ug/l for copper | 1 | 1.3 | 1.3 | Ppm | N | Erosion of natural deposits; Leaching from preservatives; Corrosion of household plumbing systems. |
| Lead | 2015 | 5.3 3 out of 20 samples exceeded the action level of 15.0 ug/l for lead | 0 | 0 | 15 | Ppb | N | Corrosion of household plumbing systems; Erosion of natural deposits |
| Radioactive Contaminants | | | | | | | | |
| Radon | 2015 | 1.46 | 1.46—1.46 | 0 | 5 | pCi/L | N | Erosion of natural deposits |
| Radium-226/228 | 2015 | 4.89 | 4.89—4.89 | 0 | 15 | pCi/L | N | Erosion of natural deposits |
| Organic Contaminants | | | | | | | | |
| Benzene | 2015 | 0.00376 | 0—0.00376 | 10 | 10 | Ppm | N | Discharge from petroleum factories; Discharge from Chemical factories |

| CONTAMINANTS | SAMPLE YEAR | LEVEL DETECTED | RANGE | MCLG | MCL | UNITS | VIOLATION | LIKELY SOURCE OF CONTAMINATION |
|---|-------------|----------------|-----------|-----------|----------|-------|-----------|--|
| Microbiological | | | | | | | | |
| Disinfectants and Disinfection By Products | | | | | | | | |
| Chlorine | 2018 | 0.88 | 0.28—1.82 | MRDLG = 4 | MRDL = 4 | Ppm | N | Water additive used to control microbes. |
| Inorganic Contaminants | | | | | | | | |
| | | | | | | | | Discharge of drilling wastes; Discharge from metal refineries; |

Violations and Exceedances

Level 1 Assessment and Sanitary Defects

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliform indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct one Level 1 Assessment(s). One Level 1 Assessment(s) were completed. In addition, we were required to take one corrective action(s) and we completed one assessment(s).

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