

City of Wauseon Drinking Water Consumer Confidence Report for 2016

The City of Wauseon 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, ideas on how to participate in decisions concerning your drinking water, and water system contacts.

Source Water Information In August of 2001, the City of Wauseon's reservoir began receiving water from the Maumee River. Since then, this is where the majority of Wauseon's water comes from. The City of Wauseon also receives its drinking water from two creeks that collect runoff from a total area of 6.6 square miles. Big Ditch is west of the plant, and this water is mainly from field runoff. Stuckey Ditch is east of the plant, and this water is from field and street runoff from the city. All water is sent to Wauseon's two reservoirs before entering the water plant.

The City of Wauseon public water system uses surface water drawn from intakes on Big Ditch and Stuckey Ditch. For the purpose 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 Wauseon's drinking water source protection area contains potential contaminant sources such as agricultural runoff (animal feedlots/pasture, pesticide/fertilizer storage and application), home construction runoff, oil/gas production activities, landfills, commercial/ industrial sources, and combined sewer overflows.

The City of Wauseon's public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Big Ditch and Stuckey Ditch. More detailed information is provided in the City of Wauseon's Drinking Water Source Assessment report, which can be obtained by calling Lou Thourot at (419)-335-2971.

The City of Wauseon also has an emergency connection with the Village of Delta. During 2016 we received no water through this connection. This report does not contain information on the water quality of the Village of Delta but a copy of their consumer confidence report can be obtained by contacting the Village of Delta at (419)-822-4143.

What are sources of contamination to drinking water? The sources of drinking water, which consists of 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. As the water travels, it can also absorb 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, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- (B) Inorganic contaminants, such as salts and metals, 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 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, 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 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).

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).

About your drinking water The EPA requires regular sampling to ensure drinking water safety. The City of Wauseon conducted sampling for bacteria; inorganics; synthetic organic; and volatile organic contaminant sampling during 2016. Samples were collected for a total of 98 different contaminants, most of which were not detected in the City of Wauseon 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, is more than one year old.

Listed below is information on those contaminants that were found in the City of Wauseon drinking water.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Bacteriological							
Coliform bacteria tests	0	1	0	0-1	No	2016	Naturally present in the environment
Chlorine / TOC							
Total Chlorine (ppm)	NA	4	1.27	0.3-2.2	No	2016	Water additive used to control microbes.
TOC* (*)	NA	< 1	1.86	1.43-2.32	No	2016	See note below (*)
Inorganic Contaminants							
Copper (ppb)	1300	1300 A.L.	58	4-58	No	2014	Corrosion of household plumbing systems
Fluoride (ppm)	NA	4.0	0.99	0.82-1.23	No	2016	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	1.11	0.51-2.25	No	2016	Runoff from fertilizer use; Erosion of natural deposits
Barium (ppm)	NA	2	0.009	NA	No	2016	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Lead (ppb)	0	15 A.L.	ND	ND	No	2014	Corrosion of household plumbing systems
Volatile Organic Contaminants (all in ppb)							
Trihalomethanes (ppb)	NA	80	86.7	7.3-156	yes	2016	By-product of drinking water chlorination
Bromodichloromethane	NA	NA	18.9	1.7-26.8	No	2016	By-product of drinking water chlorination
Chloroform	NA	NA	119	4.5-119	No	2016	By-product of drinking water chlorination
Bromoform	NA	NA	1.1	ND-1.1	No	2016	By-product of drinking water chlorination
Dibromochloromethane	NA	NA	9.5	1.1-9.5	No	2016	By-product of drinking water chlorination
Total Haloacetic Acids	NA	60	29.5	15.8-29.5	No	2016	By-product of drinking water chlorination
Turbidity							
Turbidity (NTU's)	NA	TT	0.3	0.1-0.22	No	2016	Soil runoff
Turbidity (% meeting standard)	NA	TT	100%	100%	No	2016	Soil runoff
Synthetic Organic Contaminants including Pesticides and Herbicides							
Atrazine (ppb)	3	3	0.52	<0.3-0.52	No	2015	Runoff from herbicide used on row crops
Atrazine (ppb)	3	3	< 0.3	< 0.3	No	2016	Runoff from herbicide used on row crops
Radioactive Contaminants							
Radium-228 (pCi/L)	NA	5	0.14	NA	no	2013	Erosion of natural deposits

**The value reported under “Level Found” for Total Organic Carbon (TOC) is the lowest ratio between the percentages of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) 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 daily samples and shall not exceed 1 NTU at any time. In 2016; 1,277 turbidity samples were run. The City of Wauseon’s highest recorded turbidity result for 2016 was 0.22 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.

Microbiological

The total coliform regulation is based on the presence and absence of total coliform. A public water system is in compliance if the following criteria are met:

- A. No more than 5% of samples collected during the month can be positive.
- B. No resamples collected during the month can be positive.

We had zero positive samples collected out of 108 total microbiological samples through the year 2016.

Lead

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 Wauseon 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 or at <http://www.epa.gov/safewater/lead>. The City of Wauseon did their triennial distribution testing in 2014; 20 houses were tested with all being no detect for lead.

Total Trihalomethane

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. The City of Wauseon was in violation above the MCL of 80 parts per billion (ppb), in 2016. This MCL is a running average, so each quarter uses the previous four quarters. In 2016, our highest running average was 86.7 ppb, for one of the sampling sites (DS201), in the third quarter. The City has implemented treatment for TTHM’s in its water towers. This has caused us to adjust how we operate the distribution system. In the third quarter, warmer summer water temperature created a need to move more water through the 700K water tower. Our adjustment fell a little short of the MCL goal which caused the average for site DS201 to be 6.8 ppb over. Further adjustments were made to bring us back into compliance in the fourth quarter monitoring period. The City of Wauseon is continually striving to improve this situation. We are planning to add aeration at the water treatment plant. We are also planning for the addition of an adjustable valve at the 300K tower to allow for more flexibility in the hydraulics of the distribution system. Dealing with total trihalomethanes is an issue that has continued to plague many communities in northwest Ohio.

Violations

The City of Wauseon was in violation of the filter turbidity monitoring rule. This occurred when a turbidimeter’s software froze up showing a continuous value. The value shown was in compliance. This was discovered days after the fact when operators noticed the value had not changed. Upon repair, the EPA was notified. At no time did the Water Plant’s finished turbidity spike, and both of the other filter’s monitoring devices read correctly. There were no signs of issues anywhere in the treatment process. All new turbidimeters were installed on all three filters as soon as possible after this event. Back-up units are on the shelf in case of a future failure. A letter of notification for this event mandated by OEPA is included with this report.

License to Operate

The City of Wauseon Water Plant has a current, unconditioned license to operate our water system.

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.

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 (:g/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

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

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

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.

NTU: Nephelometric Turbidity Unit, is a measure of the clarity of water. Turbidity in excess of 5 NTU's is just noticeable to the average person.

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.

Picocuries per liter (pCi/L): A common measure of radioactivity.

ND: Not detectable amounts.

NA: Not applicable

TOC: Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs).

IDSE: Initial Distribution System Evaluation

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular City Council meetings. These meetings convene at 5:00 p.m. on the first and third Monday of each month at the Municipal Building.

For more information on your drinking water contact the Water Treatment Plant at
(419) 335-2971.

Water Plant Superintendent Lou Thourot

Plant Operators Ryan J. Yackee, Robert P. Binkley, Ryan Zimmerman, Austin Abbott

Plant Hours: 8:00am-4:00pm Office Hours: 8:00am-5:00pm

Service Director Dennis Richardson 419-335-9871 .

Clerk's Office..... 419-335-1441

Water Plant..... 419-335-2971

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

If there are other people you know that use water from the City of Wauseon and may not receive this notice (i.e., renters, trailer parks, senior centers, etc.), please let them know that this information is available. Additional copies are available at the City of Wauseon municipal building as well as at the Wauseon Water Plant. This information is also available online at <http://www.cityofwauseon.com/Residents/Departments/WaterDepartment/>