

**Northwestern Water & Sewer District – SR 108**  
**Drinking Water Consumer Confidence Report For 2020**

Together, Northwestern Water & Sewer District – SR 108 and the City of Napoleon have 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.

**Source Water Information**

The Northwestern Water & Sewer District – SR 108 purchases water from the City of Napoleon.

The Napoleon Water Treatment Plant has an abundant water supply from two sources. The Napoleon Water Plant draws from the Maumee River daily. Our second source is the Wauseon Reservoir. We pump daily, weather permitting to the reservoir. In 2019 Napoleon pumped 360 million gallons of raw water to the Wauseon Reservoir. The flow can be reversed and Napoleon can flow back when there are water quality issues in the river, such as non-point agricultural runoff. Our treatment facility provided roughly 420 million gallons of clean drinking water in 2019. The City of Napoleon public water system uses surface water drawn from an intake on the Maumee River.

For the purposes of source water assessments, in Ohio all surface waters are considered 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 Napoleon’s drinking water source protection area contains potential contaminant sources such as agriculture, septic systems, oil and gas production activities, combined sewer overflows, wastewater treatment discharges, commercial and industrial sources, roadways and railways.

The City of Napoleon’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 the Maumee River. More detailed information is provided in the City of Napoleon’s Drinking Water Source Assessment report, which can be obtained by contacting the City of Napoleon Water Plant Superintendent at 419-592-8811.

**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).

**About your drinking water.**

The EPA requires regular sampling to ensure drinking water safety.

- The Northwestern Water & Sewer District – SR 108 conducted sampling for bacteria; disinfection byproducts; lead and copper during 2020. Samples were collected for a total of 14 different contaminants most of which were not detected in the Northwestern Water & Sewer District – SR 108 water supply.
- The City of Napoleon conducted sampling for bacteria; inorganics; synthetic organics; volatile organics during 2020. Samples were collected for a total of 79 different contaminants most of which were not detected in the City of Napoleon 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.

Listed below is information on those contaminants that were found in the Northwestern Water & Sewer District – SR 108 and the City of Napoleon drinking water.

**TABLE OF DETECTED CONTAMINANTS: Henry County Regional WSD - SR 108**

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)	MRDLG = 4	MRDL = 4	1.43	1.03 - 1.72	No	2020	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	16	7.8 - 12.3	No	2020	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	NA	80	51	17.5 - 68.2	No	2020	By-product of drinking water disinfection

**TABLE OF DETECTED CONTAMINANTS: Henry County Regional WSD - SR 108**

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Lead and Copper</b>							
Contaminants (units)	Action Level (AL)	Individual Results over the AL	90% of test levels were	Violation	Year Sampled	Typical source of Contaminants	
Lead (ppb)	15 ppb	0	0	No	2020	Corrosion of household plumbing systems; erosion of natural deposits	
	0 out of 5 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm)	1.3 ppm	0	0.037	No	2020	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems	
	0 out of 5 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						

**TABLE OF DETECTED CONTAMINANTS: City of Napoleon**

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Microbiological Contaminants</b>							
Turbidity (NTU)	NA	TT	0.19	0.03 - 0.19	No	2020	Soil runoff.
Turbidity (% meeting standard)	NA	TT	100%	0 - 100%	No	2020	
Total Organic Carbon	NA	TT	3.26	2.2 - 3.6	No	2020	Naturally present in the environment.
<b>Inorganic Contaminants</b>							
Barium (ppm)	2	2	0.018	0.0 - 0.018	No	2020	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	1.14	0.90 - 1.14	No	2020	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	5.49	0.419 - 5.49	No	2020	Run off from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b>							
Atrazine (ppb)	3	3	1.2	<0.7 - 1.2	No	2020	Runoff from herbicide used on row crops

**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 City of Napoleon’s highest recorded turbidity result for 2020 was 0.19 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.

**Per- and Polyfluoroalkyl Substances (PFAS)**

In 2020, the City of Napoleon water was sampled as part of the State of Ohio’s Drinking water Per- and Polyfluoroalkyl Substances (PFAS) Sampling Initiative. Six PFAS compounds were sampled and none were detected in City of Napoleon’s finished drinking water. For more information about this initiative, please visit <https://epa.ohio.gov/pfas>.

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

During the month of November, 2020 Northwestern Water & Sewer District – SR 108 failed to submit the monthly operating report on time as required by OAC 3745-83-01 (I) and/or OAC 3745-81-75. The report was submitted late and steps have been taken to prevent future violations of this nature.

### **Nitrate Educational Information**

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

### **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. Northwestern Water & Sewer District – SR 108 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>.

### **Cryptosporidium Information.**

The City of Napoleon monitored for Cryptosporidium in the source water and treated water during 2020. Cryptosporidium was detected in 3 of 12 collected from the source water and in none of the samples collected from the treated water. Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring of source water and/or finished water indicated the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing a life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

The City of Napoleon Water Treatment Plant currently has a UV disinfection system and is proud to let our customers know that the current water treatment system that is in operation effectively removes Cryptosporidium detected in the raw surface water as required by the Ohio EPA.

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

In 2020 we had a conditioned license to operate our public water system. The conditions require us to address ongoing violations. For more information on these violations, contact Northwestern Water & Sewer District at 419-354-9090.

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

Public participation and comment are encouraged at regular meetings of the Board of Trustees which meets at 7:30 am every 2nd and 4th Thursday of each month. Meetings are held at the District's Operations facility located at 12560 Middleton Pike, Bowling Green, OH 43402. For more information on your drinking water contact customer service at 419-354-9090.

Additionally, public participation and comment are encouraged at regular meetings of Napoleon City Council which meets on the 1st and 3rd Monday of each month at 7:00 pm. The city building council chambers are located at 255 West Riverview Ave. For more information on your drinking water contact the water plant superintendent at 419-592-8811.

### **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.
- **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.
- **Contact Time (CT)** means the mathematical product of a "residual disinfectant concentration" (C), which is determined before or at the first customer, and the corresponding "disinfectant contact time" (T).
- **Microcystins:** Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.
- **Cyanobacteria:** Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins, which at sufficiently high concentrations can pose a risk to public health.
- **Cyanotoxin:** Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins, and skin toxins. Also sometimes referred to as "algal toxin".
- **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.
- **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.