

Village of Liberty Center
Drinking Water Consumer Confidence Report
For 2013
PWS#3500603

The Village of Liberty Center has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included with this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

The Village of Liberty Center receives its drinking water from The City of Napoleon system. At the connection point the Village maintains booster pumps and chlorination and aeration facilities. The City of Napoleon has two raw water sources, the Maumee River and the Wauseon Reservoir. For the purposes 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 Napoleon's drinking water source protection area contains potential contaminant sources such as agriculture, septic systems, oil and gas production activities, sewer overflows, and wastewater treatment discharges, commercial and industrial sources, roadways, and railways.

The Napoleon Water Treatment Plant is a conventional lime soda-ash softening plant with additional facilities to help cope with the extreme physical and chemical characteristics of the Maumee River.

SOURCES OF DRINKING WATER CONTAMINATION

The sources of drinking water both tap water and bottled water includes 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

DEFINITIONS OF 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 a 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)- One part substance per million parts water (or Milligrams per liter).

Parts per billion (ppb)- One part substance per billion parts water (or Micrograms per liter).

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

Nephelometric Turbidity Unit (NTU)- Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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.

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.

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

Total Coliform Bacteria (TC)- Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

Not Applicable (NA)

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.

IMPORTANT HEALTH INFORMATION

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).

TURBIDITY

Turbidity is a measure of the cloudiness of the water and is an indication of the effectiveness of the 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. As reported in the table the City of Napoleon's highest recorded turbidity result for 2013 was 0.16 NTU and the

monthly percentage of samples meeting the turbidity limit was 100% which complies with the regulations.

NITRATE

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of 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

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 Village of Liberty Center 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 your 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>.

IDSE

Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system was required by the USEPA 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 byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning in 2012. Disinfection byproducts 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 byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling levels of disinfectants and disinfectant byproducts in drinking water, including both TTHM's and HAA5's. Some people who drink water containing TTHM's and HAA5's in excess of the MCL over many years may experience problems with the liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

CRYPTOSPORIDIUM

The Napoleon Water Plant tested for Cryptosporidium in 2010 and 2011. 8 of 24 samples taken of the raw water detected Cryptosporidium. It was not detected in the finished water. Cryptosporidium is a microbial parasite found in surface water throughout the US. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring of source water and/or finished water indicate the presence of these organisms. Current test methods do not allow 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, immune-compromised people are at a greater risk of developing a life threatening illness. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

LICENSE TO OPERATE

Liberty Center has a current, unconditional license to operate our water system.

PUBLIC PARTICIPATION INFORMATION

Public participation and comment are encouraged at regular meeting of the Board of Public Affairs which meets the second Tuesday of every month at 7:00 p.m.

During the past year the City of Napoleon has taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table shows only those contaminants that were detected in the water. The state allows 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.

The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between percentages of TOC actually removed to the percentage of TOC required to be removed. A value greater than (1) indicated 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.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a million chance of having the described health effect.

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 calling the Village of Liberty Center Water Department

The City of Napoleon has submitted the general plan to the EPA for approval. In this plan, the City of Napoleon, the Village of Liberty Center, and the Henry County Water & Sewer District along with the Villages of Malinta and Florida are in the planning stage of building a new membrane filter water plant to be completed in 2016. Napoleon will then meet all the requirements set in the LT2 rule established in 2006.

**Village of Liberty Center
Water Department
(419) 533-5901
Billing (419)533-3321**

| Test Results from the City of Napoleon | | | | | | | |
|--|--------|--------------|-------------|-----------------------|-----------|-----------------|--|
| Regulated Substance (unit of measure) | MCLG | MCL | Level Found | Range of Detection | Violation | Year Sampled | Typical Source of Contaminants |
| Turbidity (NTU) | NA | TT | 0.16 | 0.03-0.16 | NO | 2013 | Soil Runoff |
| Turbidity (% samples meeting limit) | NA | TT | 100% | NA | NO | 2013 | Soil Runoff |
| Atrazine (ppb) | 3 | 3 | 1.35 | 0-4.6 | NO | 2013 | Runoff from herbicide used on row crops. |
| Dichlorophenoxyacetic (2,4-D) | 70 | 70 | 0.2 | 0.2 | NO | 2013 | Runoff from herbicide used on row crops. |
| Simazine | 4 | 4 | 0.09 | 0-0.58 | NO | 2013 | Herbicide runoff. |
| Total Organic Carbon | NA | TT | 2.68 | 2.45-2.99 | NO | 2013 | Naturally present in environment |
| Total Coliform Bacteria (TC) | 0 | 1 | 1 | 0-1 | NO | 2013 | Naturally present in environment |
| Fluoride (ppm) | 4 | 4 | 1.13 | 0.82-1.13 | NO | 2013 | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate (ppm) | 10 | 10 | 9.65 | 0.40-9.65 | NO | 2013 | Runoff from fertilizer. Erosion of natural deposits. |
| Total Chlorine (ppm) | MRDL=4 | MRDLG=4 | 2.16 | 1.10-2.60 | NO | 2013 | Water additive used to control microbes |
| Other Regulated Substances | MCLG | MCL | Level Found | Range of Detection | Violation | Year Sampled | Typical Source of Contaminants |
| Haloacetic Acids (HAA5) (ppb) Stage 3 DS201, DS202 | NA | 60 | 19.55 | 11.9-37.7 | NO | 2013 | By-product of drinking water disinfection |
| Total Trihalomethanes (TTHM) Stage 3 DS201, DS202 | NA | 80 | 52.9 | 44.2-60.2 | NO | 2013 | By-product of drinking water disinfection |
| Additional Test Results from the Village of Liberty Center | | | | | | | |
| Residual Disinfectants | MCLG | MCL | Level Found | Range of Detection | Violation | Year Sampled | Typical Source of Contaminants |
| Total Chlorine (ppm) | MRDL=4 | MRDLG=4 | 0.75 | 0.5-1.0 | NO | 2013 | Water additive for disinfection. |
| Total Coliform Bacteria (TC) | 0 | 1 | 0 | 0 | NO | 2013 | Naturally present in environment |
| Volatile Organic Contaminants | MCLG | MCL | Level Found | Range of Detection | Violation | Year Sampled | Typical Source of Contaminants |
| Total Trihalomethanes (ppb)* Stage 3 | NA | 80 | 84.75 | 66.9-102 | YES | 2013 | By-product of drinking water chlorination. |
| Total Haloacetic Acids (ppb) Stage 3 | NA | 60 | 23.3 | 22.9-23.8 | NO | 2013 | By-product of drinking water chlorination. |
| Inorganic Contaminants | MCLG | MCL | Level Found | Range of Detection | Violation | Year Sampled | Typical Source of Contaminants |
| Lead (ppm) | 0 | AL 0.0155 | 0.009 | 0.005-0.009 | NO | 2013 | Corrosion of household plumbing. |
| Copper (ppm) | 1.35 | AL 1.35 | 0.05 | <0.05-0.05 | NO | 2013 | Corrosion of household plumbing. |
| IDSE Results** | MCLG | MCL | Level Found | Range of Detection | Violation | Year Sampled | |
| Total Trihalomethanes(TTHM)(ppb) | NA | 80 | 60.1 | 58.4-61.8 | NO | 2010 | By-product of drinking water chlorination. |
| Total Haloacetic Acids(HAA5)(ppb) | NA | 60 | 14 | 14-14 | NO | 2010 | By-product of drinking water chlorination. |

* The Village of Liberty Center Water Department did not meet water quality standards for Total Trihalomethanes MCL required by the Ohio EPA in 2013. The violations occurred during all four quarters of 2013. The Village has completed the construction phase and the aeration facility was operational in August of 2013. Due to a design error by the manufacturer some of the equipment used to remove TTHM in our drinking water was undersized not allowing the equipment to operate at its optimal performance level. The manufacturer is replacing the undersized equipment at no cost to the village.