
Public Water System

Consumer Confidence Report

2019



**Ohio Environmental Protection Agency
Division of Drinking and Ground Waters**

www.epa.ohio.gov/ddagw

City of St. Clairsville
Drinking Water Consumer Confidence Report
For 2019

Effective May 11, 2020, the St. Clairsville City Public Water System’s License to Operate (LTO) is “conditioned” through January 30, 2021, in compliance with all terms of the Director’s Final Findings and Orders (issued on May 11, 2020).

The City of St. Clairsville 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.

In 2019, we treated 204,577,000 gallons of water.

Also see attached and updated 2018 CCR.

What’s the Source of Your Drinking Water:

The City of St. Clairsville receives its drinking water from Main Reservoir located on Reservoir Road and Provident Reservoir located on Vineyard Hills Road.

For the purposes of source water assessments, all surface waters are considered to be susceptible to contamination. By their nature surface waters are accessible and can be readily contaminated by chemicals and pathogens with relatively short travel times from source to the intake. Based on the information compiled for this assessment, the City of St. Clairsville drinking water source protection area is susceptible to agricultural runoff, failing septic systems, and contamination through motor vehicle accidents or spills at sites where roads pass near the reservoirs.

It is important to note that this assessment is based on available data, and therefore may not reflect current conditions in all cases. Water quality, land uses and other activities that are potential sources of contamination may change with time. While the source water for the City of St. Clairsville is considered susceptible to contamination, historically, the St. Clairsville Public Water System has effectively treated this source water to meet drinking water quality standards.

Copies of the source water assessment report prepared for the City of St. Clairsville are available by contacting (740) 695-1410.

The City of St. Clairsville also has a Back-up connection with the Belmont County Water and Sewer District. During 2019 we used 3,821,000 gallons from this connection over 365 days. On average, this connection is used for approximately 20 days each year. This report does not contain information on the water quality received from the Belmont County Water and Sewer District but a copy of their consumer confidence report can be obtained by contacting their water office at (740) 695-3144.

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 City of St. Clairsville conducted

sampling for bacterial, inorganic, radiological, synthetic organic, and volatile organic contaminants during 2019. Samples were collected for a total of 60 different contaminants, most of which were not detected in the City of St. Clairsville’s 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.

Table of Detected Contaminants

Listed below is information on those contaminants that were found in the City of St. Clairsville’s drinking water.

TABLE OF DETECTED CONTAMINANTS

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Microbiological Contaminants							
Turbidity (NTU)	N/A	TT	0.63	0.02-0.63	No	2019	Soil runoff
Turbidity (% samples meeting standard)	N/A	TT	99%	N/A	No	2019	Soil runoff
Radioactive Contaminants							
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inorganic Contaminants							
Fluoride (ppm)	4	4	1.35	0.79-1.35	No	2019	Erosion from natural deposits; water additive which promotes strong teeth
Nitrate (ppm)	10	10	0.6	0.1-0.6	No	2019	Runoff from fertilizer usage
Barium (ppm)	2	2	0.0607	N/A	No	2019	Discharge of drilling wastes; erosion of natural deposits
Chromium (ppb)	100	100	2.50	N/A	No	2019	Discharge from steel and pulp mills; Erosion of natural deposits
Selenium (ppb)	50	50	1.10	N/A	No	2019	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Disinfection Byproducts							
Total Trihalomethanes (TTHM) (ppb)	N/A	80	37.75	12.10-73.6	No	2019	By-product of drinking water chlorination

Haloacetic Acid (HAA5) (ppb)	N/A	60	19.67	8.36-25.6	No	2019	By-product of drinking water chlorination
Residual Disinfectants							
Total Chlorine (ppm)	4	4	1.63	0.92-2.36	No	2019	Water additive used to control microbes
Lead and Copper							
Contaminants (units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants	
Lead (ppb)	15 ppb	18.1	1.82	No	2018	Corrosion of household plumbing systems; erosion of natural deposits	
	1 out of 20 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm)	1.3 ppm	N/A	0.383	No	2018	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
	0 out of 20 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In (year of report) (Public water system) participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). For a copy of the results please call the St. Clairsville Water Treatment Plant at 740-695-1161.

TABLE OF DETECTED UNREGULATED CONTAMINANTS

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Chloroform (ppb)	N/A	N/A	6.77	N/A	No	2019	By-product of drinking water chlorination
Dibromochloro-methane (ppb)	N/A	N/A	2.54	N/A	No	2019	By-product of drinking water chlorination
Nickel (ppb)	N/A	N/A	2.71	N/A	No	2019	Erosion of natural deposits

Total Organic Carbon (TOC)					
MCL (Units)	Level Found	Range of Monthly Ratios	Violation	Year Sampled	Typical Source of Contaminants

TT (ppm)	1.09	-0.04-2.58	No	2019	Naturally present in the environment
----------	------	------------	----	------	--------------------------------------

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 St. Clairsville’s highest recorded turbidity result for 2019 was 0.63 NTU and lowest monthly percentage of samples meeting the turbidity limits was 99%

Violations

The St. Clairsville Water Treatment Plant had a disinfection (CT) violation during the month of February, 2019. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. The St. Clairsville Water Treatment Plant took the following steps to correct this violation and prevent future violations from occurring:

New raw and finished flow meters have been installed at the treatment plant so that accurate CT values can be calculated. See attached CT treatment violation.

Findings from the 2019 sanitary survey are included in the attached Sanitary Survey Violations sheet.

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 City of St. Clairsville 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>.

Revised Total Coliform Rule (RTCR) Information

All water systems were required to begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of

total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.

License to Operate (LTO) Status Information

In 2019 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 Jeff Mottle, ORC at 740-695-1161.

Public Participation and Contact Information

How do I participate in decisions concerning my drinking water?

The City Council meets twice a month to receive Committee reports and vote on any pending legislation. Members of the public may address City Council by making arrangements at least one business day in advance of the Council Meeting with the Council Clerk Jason Garczyk, who can be reached by calling (740) 695-1324 or by sending an email to jg196210@ohio.edu.

Or

While we do not hold regular meetings, customers are encouraged to participate by contacting Jeff Mottle, ORC at 740-695-1161.

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”.
- Level 1 Assessment is a study of the water system to identify the potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
- 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 ($\mu\text{g/L}$) 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.
- Picocuries per liter (pCi/L): A common measure of radioactivity.