

Village of South Charleston

2017 Annual Water-Quality Report



Dear Customer: We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The Village of South Charleston will notify you immediately if there is any reason for concern about our water. We are happy to show you how we have surpassed water-quality standards. Informed consumers are our best allies in maintaining safe drinking water.

Drinking water supplied by Village of South Charleston is safe and better than all state and federal standards.

The Village of South Charleston has a current, unconditioned license to operate a Public Water System that was renewed in January 2017. We encourage public interest and participation in our community's decisions affecting drinking water. Public feedback is welcome. Anyone wishing to comment on water quality or the operation of the water system is encouraged to do so by attending the Village Commission meetings that are held the first and third Tuesday of each month starting at 5:00 P.M. Further information about Commission meeting dates can be obtained by calling the Village Clerk at 462-8888.

Water Source

The Village of South Charleston is supplied by groundwater wells located in the Teays Valley Aquifer, pumped from 2 wells near the Corporation Limit between Clifton Road and US 42, 1/2 mile east of State Route 41. The Ohio EPA Drinking Source Water Assessment Report rates South Charleston's water supply as a low susceptibility to contamination. The determination was based on the presence of low-permeability material overlying the aquifer, the depth of the aquifer below ground surface (127 – 140 feet), and no evidence of past contamination from chemicals or human activity. The Source Water Assessment Report is available by calling the Ohio EPA at (614) 644-2752.



About Your Drinking Water

The EPA requires regular sampling to ensure drinking water safety. The Village of South Charleston conducted sampling for contaminants during 2017. Samples for lead and copper analysis were also collected in 2017. Samples are collected for 6 different categories of regulated contaminants, most of which, were not detected in the Village of South Charleston Public Water System. 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. Listed in the table is information on those contaminants that were found.

The table shows the results of our water-quality analyses. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement. Definitions of MCL and MCLG are important.

CCR Reporting Violations

The Ohio EPA noted the following 2016 CCR inaccuracies: (1) The 2016 CCR reported the 2014 detection for Nitrate instead of the 2016 detection of Nitrate at 0.451 ppm; (2) Copper was reported in ppb. Copper should be reported in ppm. Steps have been taken to ensure that information contained in the CCR is being reported as required.

WATER QUALITY TABLE

Contaminant Units	MCL	MCLG	Level Detected	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Inorganic Contaminants Regulated at the Treatment Plant							
Barium (ppm)	2	2	0.0703	N/A	No	2017	Erosion of natural deposits Discharge of drilling wastes; Discharge from metal refineries;
Fluoride (ppm)	4	4	1.40	N/A	No	2017	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from aluminum Factories
Nitrate (ppm)	10	0	0.662	N/A	No	2017	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radiological Contaminants Regulated at the Treatment Plant							
Alpha Emitters (pCi/L)	15	0	5.11	N/A	No	2017	Errosion of natural of deposits
Combined Radium (pCi/L)	5	0	3.83	N/A	No	2017	Errosion of natural deposits
Lead & Copper Regulated at the Customer Tap							
Lead (ppb)	15 AL	Sample Results Above AL (NA)	90th Percentile <2.00	N/A	No	2017	Corrosion of household plumbing systems; Erosion of natural deposits
		None of the 10 samples collected had lead levels in excess of the lead AL of 15 ppb.					
Copper (ppm)	1.3 AL	0	90th Percentile 0.944	N/A	No	2017	Corrosion of household plumbing systems; Erosion of natural deposits
		None of the 10 samples collected had copper levels in excess of the copper AL of 1.3 ppm.					
Residual Disinfectants Regulated in the System							
Total Chlorine (ppm)	4.0 MRDLG	4.0 MRDLG	1.28	1.15 - 1.28	No	2017	Water additive used to control microbes
Volatile Organic Contaminents Regulated in the System							
Total THMs (ppb)	80	0	5.890	4.510 – 5.890	No	2017	By-product of drinking water Chlorination
HAA-5s (ppb)	60	0	1.828	0 – 1.828	No	2017	By-product of drinking water Chlorination

Water-Quality Table Footnotes

Although we ran many tests, only the listed substances were found. They are all below the MCL required.

Key To Table

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

MCLG = Maximum Contaminant Level Goal: 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.

pci/l = picocuries per liter (a measure of radioactivity)

mrem/year = millirems per year (a measure of radiation absorbed by the body)

TTHM's = Total Trihalomethanes: Some people who drink water containing trihalomethanes in excess of the

MCL = Maximum Contaminant Level: 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.

MRDL = Maximum Residual Disinfectant Level: 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.

MRDLG = Maximum Residual Disinfectant Level Goal: 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.

ppm = Parts per Million 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.

MCL over many years may experience problems with their liver, kidneys, or central nervous systems and may have an increased risk of getting cancer.

ppb = Parts per Billion 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.

HAA-5 = Haloacetic Acids:

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Unregulated Contaminants

Village of South Charleston did not test for Cryptosporidium.

Village of South Charleston did not test for Radon

Lead and Water

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 Village of South Charleston 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> homes.

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 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 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, stormwater runoff, and residential uses. (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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.

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 (800-426-4791).

Who needs to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than is 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 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 infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

Prepared By

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For more information, call The Village of South Charleston at (937) 462-7167.