

# Village of South Charleston

## 2016 Annual Water-Quality Report



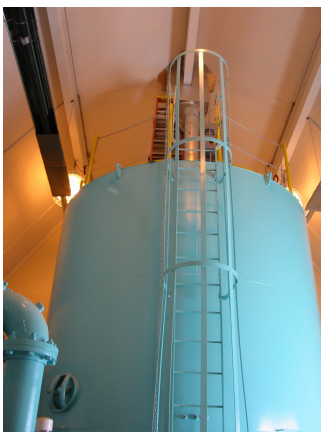
Dear Customer: We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report 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 2016. 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.



### **How Do I Read This Chart?**

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.

**Maximum Contaminant Level or 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.

**Maximum Contaminant Level Goal or 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.

## WATER QUALITY TABLE

Contaminant Units)	MCL	MCLG	Level Detected	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Inorganic Contaminants Regulated at the Treatment Plant</b>							
Barium (ppm)	2	2	0.0759	N/A	No	2014	Erosion of natural deposits Discharge of drilling wastes; Discharge from metal refineries
Fluoride (ppm)	4	4	1.35	N/A	No	2014	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from aluminum Factories
Nitrate (ppm)	10	10	0.205	N/A	No	2014	Runoff from fertilizer use; Erosion of natural deposits
<b>Radiological Contaminants Regulated at the Treatment Plant</b>							
Radium 226/228 (pCi/L)	5	0	1.3	N/A	No	2014	Errosion of natural of deposits
<b>Lead &amp; Copper Regulated at the Customer Tap</b>							
Lead (ppb)	15 90th Percentile	0	<u>90<sup>th</sup> Percentile</u> 2.40	<u>Results Over AL</u> 21.8 ppb	No	2016	Customer plumbing & service connection
<b>One (1) out of 41 samples had lead levels in excess of the AL = 15 ppb</b>							
Copper (ppb)	1,300 90 <sup>th</sup> Percentile	0	<u>90<sup>th</sup> Percentile</u> 902	N/A	No	2016	Customer plumbing & service connection
<b>Zero out of 41 samples had copper levels in excess of the AL = 1,300 ppb</b>							
<b>Microbiological Contaminants Regulated in the System</b>							
Total Coliform Bacteria	1*	0	1	0 - 1	No	2016	Naturally Present in the environment
<b>Volatile Organic Contaminants Regulated in the System</b>							
HAA-5s (ppb)	60	0	11.70	0 – 11.70	No	2016	By-product of drinking water chlorination
<b>Residual Disinfectants Regulated in the System</b>							
Total Chlorine (ppm)	4.0	4.0	1.17	0.74 – 1.73	No	2016	Water additive used to control microbes

\*Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. In 2016 one (1) distribution sample was positive for coliform bacteria. There were 29 samples analyzed.

### 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

MCLG = Maximum Contaminant Level Goal

NTU = Nephelometric Turbidity Units

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

ppt = parts per trillion, or nanograms per liter

ppq = parts per quadrillion, or picograms per liter

MCL = Maximum Contaminant Level

MFL = million fibers per liter

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

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (µg/l)

TT = Treatment Technique

### 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. 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. Information on lead is available from the Safe Drinking Water Hotline (800-426-4791) or at <http://www.epa.gov/safewater/lead>." There are other sources of lead exposure, including paint chips. Lead was not detected in the samples collected at Village of South Charleston homes.

## **Additional Health Information**

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water. 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. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. From subsequent monitoring, we believe the cause was from contaminated sample bottles. 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).

## **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.

## **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.