

2019 Annual Water Quality Report -Town of Cleveland PWSID #1167115

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need 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 infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

Your drinking water source is groundwater drawn from two drilled wells: The Kiser Well located on route T695 and the Tank Hollow Well located approximately 400 feet South of T1207/T1208.

Source Water Assessment and its Availability

The Virginia Department of Health conducted a source water assessment of the Town's system in 2002. The wells were determined to be of high susceptibility to contamination using the criteria developed by the state in its approved Source Water Assessment Program. The assessment report consists of maps showing the source water assessment area, an inventory of known land use activities of concern, and documentation of any known contamination. The report is available by contacting your water system representative at the phone number or address given elsewhere in this drinking water quality report.

Why are there contaminants in my drinking 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
- 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 stormwater runoff, and septic systems;
- 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 that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

Cleveland's Town Council meets the 4th Monday of each month at 6:30 PM.

Description of Water Treatment Process

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Other Information - Sodium

There is presently no established standard for sodium in drinking water. Water containing more than 270 ppm of sodium should not be used as drinking water by those persons whose physician has placed them on a moderately restricted sodium diet. Water containing more than 20 ppm should not be used as drinking water by those persons whose physician has placed them on a severely restricted sodium diet. For informational purposes, we wish to point out that the results of our most recent sampling indicate that your water has a sodium content of 57.6 ppm (2019 - Kiser Well) and 49.4 (2014 - Tank Hollow Well).

Monitoring and reporting of compliance data violations

The Town of Cleveland was issued six (6) Notices of Violation (NOV) for failure to perform compliance monitoring and/or reporting in calendar year 2018. The violations are as follows:

On May 22, 2019, the Town was issued a Notice of Violation (MONITORING, ROUTINE, MAJOR (RTCR)) for failure to collect a compliance bacteriological sample to test for the presence of total coliforms in general and E. coli specifically, during the month of April, 2019.

On May 22, 2019, the Town was issued a Notice of Violation (MONITORING, ROUTINE (DBP), MINOR) for failure to collect and report a distribution system chlorine residual sample along with the required quarterly sampling for Disinfection By-Products (DBP) for the 2nd quarter (April-June) of 2019. In addition to quarterly DBP sampling, chlorine levels in the Town's water are typically measured and reported when compliance bacteriological samples are collected each month.

On June 24, 2019, the Town was issued a Notice of Violation (MONITORING, ROUTINE, MAJOR (RTCR))

for failure to collect a compliance bacteriological sample to test for the presence of total coliforms in general and E. coli specifically, during the month of May, 2019.

On September 19, 2019, the Town was issued a Notice of Violation (MONITORING, ROUTINE, MAJOR (RTCR)) for failure to collect a compliance bacteriological sample to test for the presence of total coliforms in general and E. coli specifically, during the month of August, 2019.

On September 19, 2019, the Town was issued a Notice of Violation (MONITORING, ROUTINE (DBP), MINOR) for failure to collect and report a distribution system chlorine residual sample along with the required quarterly sampling for Disinfection By-Products (DBP) for the 3rd quarter (July-September) of 2019. In addition to quarterly DBP sampling, chlorine levels in the Town's water are typically measured and reported when compliance bacteriological samples are collected each month.

The health effects of these violations are unknown. However, as stated elsewhere in this report, your water is treated by disinfection involving the addition of chlorine to kill dangerous bacteria and microorganisms that may be in the water. Routine bacteriological sampling of the water and the measuring of chlorine residuals in the distribution system are proscribed methods for monitoring the effectiveness of the disinfection process used to protect public health. Though the Safe Drinking Water Act requires that the reporting of monitoring violations specifically state that the health effects of monitoring violations are unknown, neither the Virginia Department of Health nor the Town believe that you were ever in any danger. Analysis of all of the other compliance samples for the year showed the absence of bacteria and the presence of chlorine sufficient to protect the public health.

On September 19, 2019, the Town was issued a Notice of Violation (PUBLIC NOTICE RULE LINKED TO VIOLATION) for failing to comply with public notification requirements linked to the previously disclosed monitoring and reporting violations. Public notification was completed and proper certification of same was returned to the Virginia Department of Health, returning the Town to compliance in November of 2019.

Additional Information for Lead

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. Town of Cleveland 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 or at <http://www.epa.gov/safewater/lead>.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table

is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl ₂) (ppm)	4	4	.47	.32	.58	2019	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	1.2	NA	NA	2018	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	3.3	NA	NA	2017	No	By-product of drinking water disinfection
Inorganic Contaminants								
Barium (ppm)	2	2	.48	.47	.48	2014 & 2016	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	.4	.31	.4	2014 & 2016	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	1.73	.77	1.73	2017 & 2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	1.5	.41	1.5	2014 & 2015	No	Erosion of natural deposits
Beta/photon emitters (pCi/L)	0	50	4.6	4.2	4.6	2014 & 2015	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.
Radium (combined 226/228) (pCi/L)	0	5	.8	.8	.8	2014 & 2015	No	Erosion of natural deposits
Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source	
Inorganic Contaminants								
Copper - action level at consumer taps (ppm)	1.3	1.3	.049	2019	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead - action level at consumer taps (ppb)	0	15	2.76	2019	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	

Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)

Unit Descriptions	
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	Definition
MCLG	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.
MCL	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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a 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.
MRDL	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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

Contact Name: David Wallace
Address: 6654 Cleveland Road
Cleveland, VA 24225
Phone: 276-889-4365