

2020 WATER QUALITY REPORT

Route 29 North Area Water System

PWS ID No: 5143988



The Pittsylvania County Service Authority (PCSA) is pleased to present the 2020 Annual Water Quality Report (Consumer Confidence Report - CCR) 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. Our goal is always to provide you with a safe and dependable supply of drinking water. Note: Paper copies will not be mailed but are available upon request or can be viewed on our website (pcsa.co) under: "Water Quality Reports".

WHERE DOES MY WATER COME FROM?

The source of your drinking water is the Dan River which is classified as a surface water source, provided by the City of Danville. Treatment of the raw water is provided at the City of Danville Water Treatment Plant and consists of chemical addition, coagulation, flocculation, settling, filtration, fluoridation, corrosion control and chlorination. All of these processes work together to remove any physical, chemical, or biological contaminants to make the water safe for drinking.

SOURCE WATER ASSESSMENT AND ITS AVAILABILITY

A source water assessment of our system was conducted in 2002 by the Virginia Department of Health. The river was 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 within the last 5 years. The report is available by contacting your water system representative, Mr. Christopher Adcock at (434) 432-7135.

WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?

All 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. Contaminants that may be present in source water include:

- 💧 Microbial contaminants, such as viruses and bacteria, which 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 storm water 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 storm water runoff, and residential uses.
- 💧 Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- 💧 Radioactive contaminants, which can be naturally-occurring or the result of oil / gas production or 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.

IS MY WATER SAFE? 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).

KEEP AN EYE ON YOUR WATER SYSTEM

With vandalism and terrorism in the world becoming an increasing concern, we are asking that you be vigilant. Please report any suspicious activity that you might see or encounter to the PCSA office at 434-432-7135 or call the Sheriff's Department. This can be as simple as spotting someone other than the fire department getting water from a fire hydrant, non-PCSA staff tampering with a meter or suspicious activity at a water tank or our booster (pumping) stations.

PROTECTING THE SOURCE OF YOUR DRINKING WATER

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- 💧 Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- 💧 Pick up after your pets.
- 💧 If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- 💧 Dispose of chemicals properly; take used motor oil to a recycling center.

HELP US PROTECT YOUR WATER SYSTEM – BACKFLOW PREVENTION

As required by the Virginia Department of Health (VDH), the PCSA must establish and enforce a Cross Connection Control and Backflow Prevention Program. The purpose of this program is to protect the PCSA drinking water system from contamination as a result of any cross-connections made to or backflow entering the water distribution system. A “cross-connection” is any connection between your drinking water and a source of contamination. An example is a lawn irrigation system connected to both the public water system and another water source, like a well. A “backflow” can occur with a sudden loss of system pressure or an increase in pressure on the customer's side of the meter. If either happens, contaminants can be sucked in the public water system. Hoses left submerged in swimming pools, kitchen sinks, bath tubs, animal watering troughs, or having chemical sprayers attached to them while weed-killing are conditions that can be very hazardous or in extreme cases, death.

WATER CONSERVATION TIPS

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference. Try one today and soon it will become second nature:

- 💧 Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- 💧 Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month
- 💧 Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- 💧 Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- 💧 Water plants only when necessary. Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- 💧 Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- 💧 Visit www.epa.gov/watersense for more information.

FIX A LEAK!

- 💧 PCSA customers are responsible for all water usage on their side of the meter.
- 💧 The average household's leaks can account for more than 10,000 gallons of water wasted every year, or the amount of water needed to wash 270 loads of laundry.
- 💧 Common types of leaks found in the home include worn toilet flappers, dripping faucets, and other leaking valves. All are easily correctable.
- 💧 One way to find out if you have a toilet leak is to place a drop of food coloring in the toilet tank. If the color shows up in the bowl within 15 minutes without flushing, you have a leak. Make sure to flush immediately after this experiment to avoid staining the tank.
- 💧 If your toilet is leaking, the cause is often an old, faulty toilet flapper. Replacement of the whole rubber flapper is a relatively easy, inexpensive do-it-yourself project that pays for itself in no time.
- 💧 A leaky faucet that drips at the rate of one drip per second can waste more than 3,000 gallons per year.
- 💧 A leak in your main supply line or irrigation system as small as 1/32 of an inch in diameter (about the thickness of a dime) can waste about 6,300 gallons of water per month.

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. The Pittsylvania County Service Authority 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 the 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

SODIUM

There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. The sodium level as reported in the Danville supply, which provides your water, was 10.2 mg/L (ppm) as tested in 2020.

MICROBIOLOGICAL CONTAMINANTS

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. The PCSA is pleased to report that there were **no detections** of total coliforms or e-coli bacteria in the monthly samples collected during calendar year 2020.

VIOLATION INFORMATION

The Route 29 North Area Water System **did not** receive any monitoring violations during the 2020 calendar year.

QUESTIONS?

If you have questions about this report or want additional information about any aspect of your drinking water, please contact Chris Adcock, Director, at (434) 432-7135, Monday through Friday during regular office hours (9:00 A.M. - 5:00 P.M.). The PCSA is now part of the Pittsylvania County Department of Public Works. The Pittsylvania County Board of Supervisors meet on the 3rd Tuesday of each month at 7:00 p.m. at the Board Meeting Room, 39 Bank Street, SE, Chatham, VA. Please visit our website (pcsa.co) for additional information.

WATER QUALITY RESULTS

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The following table lists those drinking water contaminants that had some level of detection and that we are required to test for. 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.

The U.S. Environmental Protection Agency sets MCLs at very stringent levels. In developing the standards EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-one-million chance of having the described health effect for other contaminants.

WATER QUALITY RESULTS TABLE

Contaminants (Unit of Measurement)	MCLG	MCL	Level Found In Your Water	Range		Date of Sample (frequency of test)	Violation	Typical Source of Contamination
				Low	High			
Disinfection Byproducts, Precursors and Residuals - tested at specific tap locations throughout the system								
TTHM (Total Trihalomethanes) (ppb)	NA	80	Highest LRAA: 39	21	48	Sampled quarterly throughout 2020	No	By-product of drinking water disinfection
HAA5 -Total Haloacetic Acids (ppb)	NA	60	Highest LRAA: 39	22	49	Sampled quarterly throughout 2020	No	By-product of drinking water disinfection
Chlorine (ppm)	MRDLG = 4	MRDL = 4	Highest RAA = 0.62	0.5	0.8	Monthly	No	Water additive used to control microbes

Lead & Copper Contaminants – tested at specific tap locations throughout the system									
Contaminants (Unit of Measurement)	MCLG	AL	Level Found (90 th Percentile)	Exceeds AL?	Range		# of Samples Exceeding AL	Date of Sample (Frequency)	Typical Source of Contamination
					Low	High			
Copper (ppm or mg/L)	1.3	1.3	0.38	No	0.0015	0.080	0	September 2020 (every 3 years)	Corrosion of household plumbing
Lead (ppb)	0	15	<0.001	No	ND	2.2	0	September 2020 (every 3 years)	Corrosion of household plumbing

The source water for the Route 29 North Area water system is obtained from the City of Danville, therefore we are providing testing data below from the City of Danville system.

Regulated Contaminants – from City of Danville Supply								
Contaminants (Unit of Measurement)	MCLG	MCL	Level Found In Your Water	Range		Date of Sample (frequency of test)	Violation	Typical Source of Contamination
				Low	High			
Gross Alpha (pCi/L)	0	15	< 0.49	NA	NA	May 2020 (every 6 years)	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	< 0.01	NA	NA	May 2020 (every 6 years)	No	Erosion of natural deposits
Barium (ppm)	2	2	0.022			August 2020 (annually)	No	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits
Turbidity (NTU) (in finished water)	NA	TT = 1 NTU max	Max = 0.374	0.017	0.374	Tested continuously at plant	No	Soil runoff
		TT = at least 95% of the monthly samples < 0.3 NTU	100% of samples < 0.3 NTU					
Fluoride (ppm)	4	4	Avg. = 0.69	0.50	0.73	Tested continuously at plant	No	Water additive which promotes strong teeth
Nitrate/Nitrite (ppm)	10	10	< 0.31	NA	NA	August 2020 (annually)	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (TOC) – removal ratio	NA	TT – based on the % of TOC removed during the treatment process; ratio must be ≥ 1.00	Lowest Running Avg. = 0.99	0.89	1.82	Tested monthly at raw and treated water	No	Naturally present in the environment

Unit Descriptions	
Term	Definition
ppm	Parts per million (ppm) or milligrams per liter (mg/L) - one part per million corresponds to one minute in two years or one penny in \$10,000.
ppb	Parts per billion (ppb) or micrograms per liter (µg/l) - one part per billion corresponds to one minute in 2,000 years, or one penny in \$10,000,000.
pCi/L	pCi/L - picocuries per liter (a measure of radioactivity)
NA	NA - not applicable
ND	ND - Not detected (lab analysis indicates that the contaminant is not detectable, based on the limits of the analytical equipment used)
NR	NR - Monitoring not required, but recommended.
<	< = less than symbol. Indicates all sample levels were less than the value shown in the table.

Important Drinking Water Definitions	
Term	Definition
MCLG	<u>M</u> aximum <u>C</u> ontaminant <u>L</u> evel <u>G</u> oal - 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	<u>M</u> aximum <u>C</u> ontaminant <u>L</u> evel - 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	<u>T</u> reatment <u>T</u> echnique - A required process intended to reduce the level of a contaminant in drinking water.
AL	<u>A</u> ction <u>L</u> evel - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
NTU	<u>N</u> ephelometric <u>T</u> urbidity <u>U</u> nit - a measure of very small particulate matter in drinking water (cloudiness).
RAA	<u>R</u> unning <u>A</u> nnual <u>A</u> verage - The average of sample results for the prior 12 months, calculated quarterly.
LRAA	<u>L</u> ocational <u>R</u> unning <u>A</u> nnual <u>A</u> verage - The average of sample analytical results for samples taken at a particular monitoring location in the distribution system during the previous four calendar quarters.
MRDL	<u>M</u> aximum <u>R</u> esidual <u>D</u> isinfectant <u>L</u> evel - 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	<u>M</u> aximum <u>R</u> esidual <u>D</u> isinfectant <u>L</u> evel <u>G</u> oal - 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 contamination.