2018 Annual Water Quality Report – Thompson Creek Waterworks PWSID #1167814

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?

The source of your drinking water is groundwater pumped and blended from four drilled wells owned and operated by the Town of Honaker.

Source Water Assessment and its Availability

The Virginia Department of Health performed Source Water Assessments of all four of the Town of Honaker's wells in 2002 and found them all to be of high susceptibility to contamination. Each groundwater source is constructed in an area that promotes migration of contaminants with land use activities of concern and potential conduits to groundwater in the zone 1 assessment area and/or potential sources of contamination in the zone 1 or zone 2 assessment areas. The reports are 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?

The Russell County PSA Board of Directors meetings are scheduled for the third Monday of each month at 6:00 pm. The meetings are held at the Russell County Government Center 137 Highland Dr. Lebanon, VA.

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.

Monitoring and Reporting of Compliance Data Violations

On July 17, 2018, the RCPSA/Thompson Creek Waterworks was issued a Notice of Violation (NOV) by the Virginia Department of Health Office of Drinking Water (VDH ODW): MONITORING, ROUTINE (RTCR), MINOR for failure to collect and analyze a bacteriological sample for the month of June, 2018. Routine bacteriological samples are used to monitor your drinking water for the presence of coliform bacteria. When found in drinking water, coliform bacteria – which are harmless – indicate that conditions are favorable for more harmful bacteria to grow, including E.Coli. Other samples collected in 2018 all tested negative for the presence of coliform bacteria and it is not believed that you were in any danger due to this oversight. No action on your part is necessary.

On July 17, 2018, the RCPSA/Thompson Creek Waterworks was issued a Notice of Violation (NOV) by the Virginia Department of Health Office of Drinking Water (VDH ODW): MONITORING, ROUTINE (DBP), MINOR for failure to failure to report chlorine disinfectant residuals for the month of June, 2018. The Town of Honaker uses chorine in the water treatment process in order to control microbes and protect against the presence of bacteria in your drinking water. The RCPSA is required to sample for the presence of and report the amounts of chlorine found in the water system and normally does so at the same time routine bacteriological samples are collected. Other samples collected in 2018 all tested for the presence of sufficient chlorine and it is not believed that you were in any danger due to this oversight. No action on your part is necessary.

On October 17, 2018, the RCPSA/Thompson Creek Waterworks was issued a Notice of Violation (NOV) by the Virginia Department of Health Office of Drinking Water (VDH ODW): MONITORING, ROUTINE (IDSE), MAJOR for failure to collect samples for Total Haloacetic Acids (HAA5) for the 3rd quarter monitoring period of 2018 (July - September 2018). Some people who drink water containing haloacetic acids (by-products formed when chlorine or other disinfectants come into contact with natural occurring organic matter present in water) in excess of the MCL over many years may have an increased risk of getting cancer. RCPSA collected the required sample in October 2018; results for the October 2018 sample tested well below the MCL and it is not believed that you were ever in any danger. No action on your part is necessary.

On October 17, 2018, the RCPSA/Thompson Creek Waterworks was issued a Notice of Violation (NOV) by the Virginia Department of Health Office of Drinking Water (VDH ODW): MONITORING, ROUTINE (IDSE), MAJOR for failure to collect samples for Total Trihalomethanes (TTHM) for the 3rd quarter monitoring period of 2018 (July - September 2018). Some people who drink water containing trihalomethanes (by-products formed when chlorine or other disinfectants come into contact with natural occurring organic matter present in water) in excess of the MCL over many years may have an increased risk of getting cancer. RCPSA collected the required sample in October 2018; results for the October 2018 sample tested well below the MCL and it is not believed that you were ever in any danger. No action on your part is necessary.

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. Thompson Creek Waterworks/RCPSA 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 Cl2) (ppm)	4	4	1.37	0.65	1.64	2018	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	LRAA ≤ 60	3.1	NA	NA	OCT 2018*	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	LRAA ≤ 80	9.6	NA	NA	OCT 2018*	No	By-product of drinking water disinfection

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Inorganic Contaminants								
Nitrate [measured as Nitrogen] (ppm)	10	10	1.64	.32	1.64	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	6.2	ND	6.2	2015 & 2018	No	Erosion of natural deposits
Beta/photon emitters (pCi/L)	0	50	3.2	1.4	3.2	2015 & 2018	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	2.0	ND	2.0	2015 & 2018	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	0.1	2016	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Inorganic Contaminants							
Lead - action level at consumer taps (ppb)	0	15	2.0	2016	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

** Sample was not collected during the month specified by the approved IDSE Sampling Plan. See Monitoring and Reporting of Compliance Date Violations elsewhere in this report.*

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)
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.

Important Drinking Water Definitions	
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
LRAA	LRAA: Locational Running Annual Average. The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

For more information please contact:

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