

PENDLETON COUNTY PSD
P.O. BOX 861
Franklin, WV 26807-0861
PWS# WV3303608-Pendleton US 220-N
PWS# WV3303609-Circleville
PWS# WV3303611-Upper Tract
PWS# WV3303613-Brandywine
PWS# WV3303614-Riverton
February 28, 2018

Why am I receiving this report?

In compliance with the Safe Drinking Water Act Amendments, the **Pendleton County PSD** is providing its customers with this annual water quality report. This report explains where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The information in this report shows the results of our monitoring for the period of January 1st to December 31st, 2017 or earlier if not on a yearly schedule.

If you have any questions concerning this report, you may contact **Stephen Roberson** or **Jay Hartman** (304) 358-3027. If you have any further questions, comments or suggestions, please attend any of our regularly scheduled water board meetings held on the 2nd **Thursday** of every month at **10:00 AM** in the **Pendleton County Community Building, 200 Confederate Road, Franklin, WV.**

Where does my water come from?

Your drinking water source is **ground** water from a spring near Eagle Rocks in the Smoke Hole for Upper Tract. A **surface** water source from the South Fork of the South Branch Potomac River is issued for Brandywine. A **ground** water source from three wells is used for Circleville. A **ground** water source from two wells is used for Riverton and purchased **ground** water from the Town of Franklin which uses springs known as Town Springs near Dry Run is used for Pendleton US 220-N.

Source Water Assessment

A Source Water Assessment was conducted in 2003 by the West Virginia Bureau for Public Health (WVBPH). The springs that supply drinking water to the **Town of Franklin** have a higher susceptibility to contamination, due to the sensitive nature of surface aquifer in which the drinking water springs are located and existing potential contaminant sources identified within the area. This does not mean that this spring will become contaminated; only that conditions are such that the surface water could be impacted by a potential contaminant source. Future contamination may be avoided by implementing protective measures. The source water assessment report which contains more information is available for review or a copy will be provided to you at their office during business hours or from the WVBPH 304-558-2981.

The wells/springs that supply drinking water to the **Circleville** and **Brandywine** facilities have a higher susceptibility (Upper Tract - moderate susceptibility) to contamination, due to the sensitive nature of the aquifers in which the drinking water wells are located and the existing potential contaminant sources identified within the area. This does not mean that the wellfields will become contaminated; only that conditions are such that the ground water could be impacted by a potential contaminant source. Future contamination may be avoided by implementing protective measures. The source water assessment report which contains more information is available for review or a copy will be provided to you at their office during business hours or from the WVBPH 304-558-2981.

Why must water be treated?

All drinking water contains various amounts and kinds of contaminants. Federal and state regulations establish limits, controls, and treatment practices to minimize these contaminants and to reduce any subsequent health effects.

Contaminants in Water

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 of 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 these 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).

The source of drinking water (both tap and bottled water) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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, 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 by-products 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 and gas production and mining activities.

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 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 and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Water Quality Data Table

Definitions of terms and abbreviations used in the table or report:

•**MCLG – Maximum Contaminant Level Goal**, or 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 – Maximum Contaminant Level**, or 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 technique.

•**MRDLG - Maximum Residual Disinfectant Level Goal**, or the level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect benefits of use of disinfectants to control microbial contaminants.

•**MRDL - Maximum Residual Disinfectant Level**, or the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary to control microbial contaminants.

•**AL – Action Level**, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

•**TT – Treatment Technique**, or a required process intended to reduce the level of a contaminant in drinking water.

Abbreviations that may be found in the table:

•**ppm** – parts per million or milligrams per liter

•**ppb** – parts per billion or micrograms per liter

•**NTU** – Nephelometric Turbidity Unit, used to measure cloudiness in water

•**NE** – not established

•**N/A** – not applicable

The **Town of Franklin and the Pendleton County PSD** routinely monitors for contaminants in your drinking water according to federal and state laws. The tables below show the results of our monitoring for contaminants.

Table of Test Results - Regulated Contaminants – Town of Franklin and Pendleton US 220N

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity	N	0.04 100% of monthly samples <.3	NTU	0	TT	Soil runoff
Total organic carbon	N	0.65	ppm	NA	TT	Naturally present in the environment
Inorganic Contaminants						
Barium	N	.0112	ppm	2	2	Discharge from drilling wastes; erosion of natural deposits
Copper*	N	0.163	ppm	1.3	AL=1.3	Corrosion of household plumbing; erosion of natural deposits
Lead*	N	1.5	ppb	0	AL=15	Corrosion of household plumbing; erosion of natural deposits
Nitrate	N	0.63	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits

Volatile Organic Contaminants

Chlorine	N	3.36 Annual avg. Range 1.40-5.80	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
Haloacetic acids** (HAAC5)	Y	1.12	ppb	NA	60	By-product of drinking water disinfection

Total trihalomethanes** (TTHMs)	Y	8.00	ppb	NA	80	By-product of drinking water disinfection
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*Copper and lead samples were collected from 10 area residences on 6-12-17. Only the 90th percentile is reported. One of the samples collected exceeded the MCL.

One of the lead samples exceeded the MCL. We have provided the offending home with information regarding the health effects and the remediation procedures for excess lead in their plumbing system. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical and mental development. Children could show deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

**For the reporting year 2017 we received several "Notice of Violation" letters from the WV Bureau for Public Health for failing to monitor or complete on time the taking of sufficient samples for haloacetic acids and total trihalomethanes. We have made every effort and taken every precaution to return to compliance. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or nervous system, and may have an increased risk of getting cancer.

Table of Test Results - Unregulated Contaminants

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Sodium	N	3.22	ppm	NE	20	Erosion of natural deposits
Sulfate	N	5.53	ppm	250	250	Erosion of natural deposits

Table of Test Results - Regulated Contaminants - Pendleton US 220N**Volatile Organic Contaminants**

Chlorine	N	1.2 Annual avg. Range 1.1-1.3	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
Haloacetic acids (HAAC5)	N	11.2	ppb	NA	60	By-product of drinking water disinfection
Total trihalomethanes (TTHMs)	N	20.4	ppb	NA	80	By-product of drinking water disinfection

Inorganic Contaminants

Copper*	N	0.025	ppm	1.3	AL=1.3	Corrosion of household plumbing; erosion of natural deposits
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*Copper and lead samples were collected from 5 area residences on 8-2-17. Only the 90th percentile is reported. None of the samples collected exceeded the MCL.

Table of Test Results - Regulated Contaminants – Circleville**Volatile Organic Contaminants**

Chlorine	N	1.4 Annual avg. Range 1.3-1.4	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
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Inorganic Contaminants

Copper*	N	0.155	ppm	1.3	AL=1.3	Corrosion of household plumbing; erosion of natural deposits
Lead*	N	1.342	ppm	0	AL=15	Corrosion of household plumbing; erosion of natural deposits

*Copper & lead samples were collected from 5 area residences on 8-2-17. Only the 90th percentile is reported. None of the samples collected exceeded the MCL.

Table of Test Results - Regulated Contaminants – Upper Tract**Microbiological Contaminants**

Total organic carbon	N	1.12	ppm	NA	TT	Naturally present in the environment
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Inorganic Contaminants

Barium	N	0.027	ppm	2	2	Erosion of natural deposits
Nitrate	N	1.42	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits
Copper*	N	0.131	ppm	1.3	AL=1.3	Corrosion of household plumbing; erosion of natural deposits

Lead*	N	1.949	ppm	0	AL=15	Corrosion of household plumbing; erosion of natural deposits
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Volatile Organic Contaminants

Chlorine	N	1.8 Annual avg. Range 1.6-1.9	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
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Haloacetic acids (HAAC5)	N	11.6	ppb	NA	60	By-product of drinking water disinfection
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Total trihalomethanes (TTHMs)	N	8.5	ppb	NA	80	By-product of drinking water disinfection
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*Copper and lead samples were collected from 10 area residences on 8-2-17. Only the 90th percentile is reported. None of the samples collected exceeded the MCL.

Table of Test Results - Unregulated Contaminants - Upper Tract

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Aluminum	N	40 Annual avg. Range 20-70	ppb	NE	200	Erosion of natural deposits
Iron	N	11	ppb	NE	300	Erosion of natural deposits

Table of Test Results - Regulated Contaminants – Brandywine**Microbiological Contaminants**

Turbidity	N	0.05 100% of monthly samples <0.3	NTU	0	TT	Soil runoff
Total organic carbon	N	2.06	ppm	NA	TT	Naturally present in the environment

Inorganic Contaminants

Barium	N	0.034	ppm	2	2	Erosion of natural deposits
Fluoride	N	0.92	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from aluminum and fertilizer plants

Nitrate	N	0.45	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits
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Copper*	N	0.006	ppm	1.3	AL=1.3	Corrosion of household plumbing; erosion of natural deposits
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Lead*	N	0.51	ppb	0	AL=15	Corrosion of household plumbing; erosion of natural deposits
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Volatile Organic Contaminants

Chlorine	N	1.9 Annual avg. Range 1.7-2.0	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
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Haloacetic acids (HAAC5)	N	37.59 Annual avg. Range 21.57-54.69	ppb	NA	60	By-product of drinking water disinfection
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Total trihalomethanes (TTHMs)	N	21.00 Annual avg. Range 8.63-31.77	ppb	NA	80	By-product of drinking water disinfection
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*Copper and lead samples were collected from 10 area residences on 8-2-17. Only the 90th percentile is reported. None of the samples collected exceeded the MCL.

Table of Test Results - Unregulated Contaminants – Brandywine

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Aluminum	N	535 Annual avg. Range 390-680	ppb	NE	200	Erosion of natural deposits
Iron	N	20	ppb	NE	300	Erosion of natural deposits
Manganese	N	0.055	ppm	NE	50	Erosion of natural deposits
Nickel	N	2.4	ppm	100	100	Erosion of natural deposits
Sodium	N	7.39	ppm	0	20	Erosion of natural deposits

Table of Test Results - Regulated Contaminants – Riverton

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants						
Nitrate	N	0.36	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits
Volatile Organic Contaminants						
Chlorine	N	1.4 Annual avg. Range 1.2-1.8	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
Haloacetic acids (HAAC5)	N	2	ppb	NA	60	By-product of drinking water disinfection

*Copper and lead samples were collected from 5 area residences on 8-3-16. Only the 90th percentile is reported. None of the samples collected exceeded the MCL.

WE ARE PLEASED TO REPORT THAT THE PENDLETON COUNTY PSD MET ALL FEDERAL AND STATE WATER STANDARDS FOR THE REPORTING YEAR 2017**Additional Information**

All other water test results for the reporting year 2017 were all non-detects.

Turbidity is a measure of cloudiness in water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

The PSD does sample for E.coli in both Upper Tract and Brandywine systems.

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 **Pendleton County PSD** 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 drinking 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>.

The **Pendleton County PSD** Upper Tract Water System and the Brandywine Water System is committed to protecting its drinking water sources. The drinking water for Upper Tract is sourced from a spring and the drinking water for Brandywine is surface water sourced from the South Fork of the South Branch Potomac River. We updated our Source Water Protection Plans (SWPP) in 2015, based on the requirements of Senate Bill 373. The SWPP includes physical actions to protect the drinking water sources such as ensuring that the source spring and the surface water is secured, and planning actions such as creating an emergency response plan. It also includes an assessment of potential sources of contamination. The SWPP's were developed by the PSD in collaboration with a local Source Water Protection Team, and with the involvement of the public. Please contact the **Pendleton County PSD** Upper Tract Water System and the Brandywine Water System to learn about source water protection.

This report will not be mailed. A copy will be made available for review or your use upon request at our office during regular business hours.