

Annual Drinking Water Quality Report 2022
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
March 28, 2023

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, 20212 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 used 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. The Eagle Rocks Spring in Smoke Hole and Franklin Town Springs have both been declard Ground Water Under the Direct Influence of Surface Water (GWUDI) and are considered surface water.

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, Upper Tract, and Riverton** 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

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

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Volatile Organic Contaminants						
Chlorine	N	1.3 Annual avg. Range 1.0 - 1.6	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
Halocetic acids (HAAC5)	N	7	ppb	NA	60	By-product of drinking water disinfection
Total trihalomethanes (TTHMs)	N	19	ppb	NA	80	By-product of drinking water disinfection

*Copper and lead samples were collected from 5 area residences on 8-11-20. Only the 90th percentile is reported. None of the samples collected exceeded the MCL.

Table of Test Results - Regulated Contaminants – Circleville

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Volatile Organic Contaminants						
Chlorine	N	1.9 Annual avg. Range 1.6 - 2.2	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
Halocetic acids (HAAC5)	N	19	ppb	NA	60	By-product of drinking water disinfection
Total trihalomethanes (TTHMs)	N	2	ppb	NA	80	By-product of drinking water disinfection
Inorganic Contaminants						
Nitrate	N	0.33	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits
Barium	N	0.181	ppm	2	2	Erosion of natural deposits
Cadmium	N	0.00012	ppm	5	5	Erosion of natural deposits;

*Copper and lead samples were collected from 5 area residences on 8-11-20. Only the 90th percentile is reported. None of the samples collected exceeded the MCL.

Table of Test Results - Unregulated Contaminants – Circleville

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Sodium	N	22.30	ppm	0	20	Erosion of natural deposits
Sulfate	N	11.1	ppm	250	250	Erosion of natural deposits;

Table of Test Results - Regulated Contaminants – Upper Tract

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity	N	0.03 100% of monthly samples <0.3	NTU	0	TT	Soil runoff
Total organic carbon	N	1.37	ppm	NA	TT	Naturally present in the environment
Inorganic Contaminants						
Barium	N	0.0268	ppm	2	2	Erosion of natural deposits
Fluoride	N	0.2	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from aluminum and fertilizer plants
Nitrate	N	1.1	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits
Volatile Organic Contaminants						
Chlorine	N	1.9 Annual avg. Range 1.2 - 2.2	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
Halocetic acids (HAAC5)	N	17	ppb	NA	60	By-product of drinking water disinfection
Total trihalomethanes (TTHMs)	N	14	ppb	NA	80	By-product of drinking water disinfection

*Copper and lead samples were collected from 10 area residences on 8-11-20. 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	127 Annual avg. Range 108 - 152	ppb	NE	200	Erosion of natural deposits
Iron	N	22	ppb	NE	300	Erosion of natural deposits
Manganese	N	0.004	ppm	NE	50	Erosion of natural deposits
Nickel	N	0.62	ppb	100	100	Erosion of natural deposits
Sodium	N	6.07	ppm	0	20	Erosion of natural deposits

Table of Test Results - Regulated Contaminants – Brandywine

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity	N	0.05 100% of monthly samples <0.3	NTU	0	TT	Soil runoff
Total organic carbon	N	2.0	ppm	NA	TT	Naturally present in the environment
Inorganic Contaminants						
Barium	N	0.0679	ppm	2	2	Erosion of natural deposits
Fluoride	N	1.1	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from aluminum and fertilizer plants
Nitrate	N	0.15	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits
Volatile Organic Contaminants						
Chlorine	N	1.9 Annual avg. Range 1.7 - 2.1	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
Halocetic acids (HAAC5)	N	21.59 Annual avg. Range 9.55 - 36.01	ppb	NA	60	By-product of drinking water disinfection
Total trihalomethanes (TTHMs)	N	19.62 Annual avg. Range 11.29 - 27.95	ppb	NA	80	By-product of drinking water disinfection

*Copper and lead samples were collected from 10 area residences on 8-11-20. 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	186 Annual avg. Range 74.7 - 263	ppb	NE	200	Erosion of natural deposits
Iron	N	53	ppb	NE	300	Erosion of natural deposits
Manganese	N	0.024	ppm	NE	50	Erosion of natural deposits
Nickel	N	0.86	ppb	100	100	Erosion of natural deposits
Sodium	N	6.86	ppm	0	20	Erosion of natural deposits

Table of Test Results - Regulated Contaminants – Riverton

Volatile Organic Contaminants						
Chlorine	N	1.6 Annual avg. Range 0.9 - 2.2	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
Halocetic acids (HAAC5)	N	3	ppb	NA	60	By-product of drinking water disinfection
Inorganic Contaminants						
Copper*	N	0.203	ppm	1.3	AL=1.3	Corrosion of household plumbing; erosion of natural deposits
Lead*	N	0.543	ppb	0	AL=15	Corrosion of household plumbing; erosion of natural deposits
Nitrate	N	0.39	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits
Barium	N	0.0551	ppm	2	2	Erosion of natural deposits

*Copper and lead samples were collected from 10 area residences on 8-13-20. Only the 90th percentile is reported. None of the samples collected exceeded the MCL.

Table of Test Results - Unregulated Contaminants – Riverton

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Sodium	N	10.30	ppm	0	20	Erosion of natural deposits