Annual Drinking Water Quality Report 2023

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REVISED May 23, 2024

In compliance with the Safe Drinking Water Act Amendments, the **Taylor 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, 2023 or earlier if not on a yearly schedule.

If you have any questions concerning this report, you may contact **Jerry Haller, Chief Operator@ 304-265-5569.** If you have any further questions, comments or suggestions, please attend any of our regularly scheduled water board meetings held on the **1st Tuesday after the 1st Monday** of every month at **4:00pm** in the **Water Board Office next to the water filtration plant, Grafton WV.**

Your drinking water is **surface** water from the Tygart Lake.

A Source Water Protection Plan was updated in 2023. The intake that supplies drinking water to the **Taylor County PSD** has a higher susceptibility to contamination, due to the sensitive nature of surface water supplies and the potential contaminant sources identified within the area. This does not mean that this intake 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 protection plan, which contains more information, is available for review or a copy will be provided to you at our office during business hours or from the WVBPH 304-558-2981.

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.

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).

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

- **AL - Action Level**, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **LRAA -** Locational Running Annual Average is an average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.
- **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.
- **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.
- **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.
- **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.
- **N/A** - not applicable
- **ND** – Not Detectable, no contaminants were detected in the sample(s) taken.
- **NE** - not established
- **NTU** - Nephelometric Turbidity Unit, used to measure cloudiness in water
- **ppb** - parts per billion or micrograms per liter **(µg/l)**
- **pCi/L** – picocuries per liter (a measure of radioactivity)
- **ppm** - parts per million or milligrams per liter **(mg/l)**
- **TT - Treatment Technique**, or a required process intended to reduce the level of a contaminant in drinking water.

Colors used in the table or report:

Table Title or Contents
Column Titles
Sample analytical results for contaminants
Table related abbreviations and definitions for them

Tables of test results for regulated contaminants:

EPA's surface water treatment rules require conventional water treatment plants like Clarksburg Water Boards to monitor Turbidity**.** The NTU must never exceed 1.0 at any time. The samples for turbidity must be less than or equal to 0.3 NTU in at least 95% of the samples in one month. Taylor County PSD's turbidity samples are in the table below. EPA considers these limits as a TT or Treatment Technique. A Treatment Technique is a required process intended to reduce the level of a contaminant in drinking water.

Turbidity			
Monthly % < 0.3 NTU	Yearly High	Violation	Likely Source of Contaminant
100 %	0.14 NTU	No	Soil runoff
NTU	Nephelometric Turbidity Unit, used to measure cloudiness in water		

The removal of Total Organic Carbon (TOC) is an important process to help control Disinfection By Products created when Chlorine is used as a disinfectant. TOC testing measures the level of organic molecules or contaminants present. TOC tests will not determine which compounds are present, but only the amount of compounds. The results of these tests are in the table below.

Total Organic Carbon (TOC)						
Contaminant	RAA	Range (low/high)	Ideal Goal (MCLG)	Highest Level Allowed (MCL)	Likely Source of Contaminant	Violation
TOC (Source)	1.9 ppm	0.97/2.8 ppm	N/A	TT	Naturally occurring in the environment	No
DOC (Source)	2.097 ppm	0.79/3.2 ppm	N/A	N/A	Naturally occurring in the environment	No
UV-(Source)-Absorbance @254 NM	0.05 CM-1	0.011/0.078 CM-1	N/A	N/A	N/A	N/A
SUVA (Source)	2.48 L/mg-m	1.4/4.2 L/mg-m	N/A	N/A	N/A	N/A
TOC (Finished)	1.37 ppm	0.98/1.8 ppm	N/A	TT	Naturally occurring in the environment	No
DOC (Finished)	1.663 ppm	0.85/2.8 ppm	N/A	N/A	Naturally occurring in the environment	No
UV-(Finished)-Absorbance @254 NM	0.025 CM-1	0.016/0.031 CM-1	N/A	N/A	N/A	N/A
SUVA (Finished)	2.04 L/mg-m	0.57/3.3 L/mg-m	N/A	N/A	N/A	N/A
RAA	Running Annual Average is an average of sample results obtained over the most current 12 months and used to determine compliance with MCL's.					
TT	Treatment Technique					
ppm	parts per million or milligrams per liter **(mg/l)**					
DOC	Dissolved Organic Carbon					
SUVA	Specific Ultraviolet Absorbance					
CM-1	An energy unit equal to the energy of a photon with a wavelength of 1 cm					
L/mg-m	SUVA is calculated by dividing the UV absorbance at 254 nm (cm^{-1}) by the DOC, mg/L of a water sample, expressed in units of L/mg-m					

Disinfectant						
Contaminant	RAA	Range (low/high)	Maximum Goal (MRDLG)	Maximum Level Allowed (MRDL)	Likely Source of Contaminant	Violation
Chlorine (water plant)	1.16 ppm	0.8 / 1.5	4	4	Water additive used to control microbes	No
Chlorine (Distribution)	1.14 ppm	0.3 / 1.7	4	4	Water additive used to control microbes	No
RAA	Running Annual Average is an average of sample results obtained over the most current 12 months and used to determine compliance with MCL's.					
MRDLG	Maximum Residual Disinfectant Level Goal, or the level of drinking water disinfectant below which there is no known or expected risk to health.					
MRDL	Maximum Residual Disinfectant Level**,** or the highest level of disinfectant allowed in drinking water.					
ppm	parts per million or milligrams per liter **(mg/l)**					

Disinfection Byproducts						
Contaminant	Location	Highest LRAA	Range (low/high)	Highest Level Allowed (MCL)	Likely Source of Contaminant	Violation
Haloacetic acids (HAA5)	Preston/Taylor County Line	42.395 ppb	17 / 40 ppb	60 ppb	By-product of drinking water disinfection	No
Total trihalomethanes (TTHMs)	Preston/Taylor County Line	55.7 ppb	17 / 64 ppb	80 ppb	By-product of drinking water disinfection	No
LRAA	Locational Running Annual Average is an average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.					
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.					
ppb	parts per billion or micrograms per liter **(µg/l)**					

Lead & Copper - samples were collected from 20 area residences on 8/20/2021. These samples are collected every three years from customer taps.						
Contaminant	90% of Test Levels Were Less Than	Ideal Goal (MCLG)	EPA's Action Level	Number of Tests With Levels Above EPA's Action Level	Typical Sources	Violation
Copper, Free	0.062 ppm	1.3 ppm	90% of homes less than 1.3 ppm	0 - out of 10	Corrosion of household plumbing	No
Lead	0.7 ppb	0 ppb	90% of homes less than 15 ppb	0 - out of 10	Corrosion of household plumbing	No
ppm	parts per million or milligrams per liter **(mg/l)**					
ppb	parts per billion or micrograms per liter **(µg/l)**					
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					

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 **Taylor 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 at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

Inorganic Contaminants						
Contaminant	RAA	Level Detected or Range	Ideal Goal (MCLG)	Highest Level Allowed (MCL)	Likely Source of Contaminant	Violation
Barium	N/A	0.025 ppm	2	2	Discharge from drilling wastes, discharge from metal refineries, erosion of natural deposits.	No
Fluoride	0.51 ppm	0.41/0.6 ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from aluminum and fertilizer plants	No
ppm	parts per million or milligrams per liter **(mg/l)**					

Radionuclides						
Contaminant	Date	Level Detected	Unit of Measure	Ideal Goal (MCLG)	Highest Level Allowed (MCL)	Likely Source of Contaminant
Gross Alpha, Excluding Radon & U	5/16/2019	0.554	pCi/L	0	15 pCi/L	Erosion of natural deposits
pCi/L	picocuries per liter (a measure of radioactivity)					

National Secondary Drinking Water Regulations are non-enforceable guidelines regarding contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply.

Secondary Contaminants			
Contaminant	Level Detected	Unit of Measure	SMCL
Aluminum	0.15	ppm	0.05 to 0.2
Iron	0.043	ppm	0.3
Manganese	0.23	ppm	0.05
Sulfate	Low14.6/High15.2/Avg. 14.9	ppm	250

In the 2023 calendar year, Taylor County PSD had the below noted violation(s) of drinking water regulations.

Date	Number	Type / Name	Compliance Period
12/6/2022	2023--1124	75 / Public Notice Rule linked to violation	1/1/19-12/31/21
12/28/2022	2023--1125	72 / CCR Adequacy / Availability / Content	10/1/22-2/9/23
3/16/2023	2023--1126	75 / Public Notice Rule linked to violation	10/1/21-12/31/21
3/16/2023	2023--1127	75 / Public Notice Rule linked to violation	10/1/21-12/31/21
3/16/2023	2023--1128	75 / Public Notice Rule linked to violation	10/1/21-12/31/21

We have made every effort and taken every precaution to return to compliance.

Additional Information

Unregulated Contaminants						
Contaminant	Date Sampled	Level Detected	Unit of Measure	MCLG	SMCL	Likely Source of Contamination
Alkalinity, Total (RAW)	2024	High 22.68 Range 18.3 – 30.6	ppm	N/A	10000	Erosion of natural deposits
Alkalinity, Total (Finished)	5/18/2024	29.8	ppm	N/A	N/A	N/A
Nickle	6/8/2023	0.0007	ppm	N/A	0.1	Erosion of natural deposits
Sodium	6/8/2023	12.1	ppm	NA	1000	Erosion of natural deposits

Anyone having a concern over sodium should contact their primary care provider.

Taylor County PSD is about 80% done on the Lead Service Line Inventory and hopes to have it complete by the deadline of October 16, 2024.

The West Virginia Bureau for Public Health performed a Sanitary Survey on July 25, 2023 and no Significant Deficiencies were reported.

All other water test results for the reporting year 2023 were non-detects or below the Reporting Limits (RL).

PLEASE SHARE THIS REPORT WITH OTHER PEOPLE WHO DRINK THIS WATER, ESPECIALLY THOSE WHO DO NOT RECEIVE THIS INFORMATION DIRECTLY. (FOR EXAMPLE, RESIDENTS IN APARTMENT BUILDINGS, NURSING HOMES, SCHOOLS AND BUSINESSES).

This report will not be mailed. A copy will be provided to you upon request at our office during regular business hours or you can get one at www.taylorcountypsd.com/2023ccr