

Annual Drinking Water Quality Report 2021
SUN VALLEY PUBLIC SERVICE DISTRICT
18 Sable Circle
Post Office Box 95
Reynoldsville, WV 26422
PWSID# 3301726
June 24, 2022

Why am I receiving this report?

In compliance with the Safe Drinking Water Act Amendments, the **Sun Valley Public Service District** 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, 2021 or earlier if not on a yearly schedule.

If you have any questions concerning this report, you may contact **Kevin C. Short, General Manager, Monday through Friday (7:00 AM – 3:30 PM) at 304-623-9609**. If you have any further questions, comments or suggestions, please attend any of our regularly scheduled water board meetings held on the **2nd Tuesday of every month at 5:00 PM in the Sun Valley Public Service District Office, 18 Sable Circle, Reynoldsville, WV 26422**.

Where does my water come from?

Your drinking water source is **purchased** from the Clarksburg Water Board. The Clarksburg Water Board utilizes **surface** water from the West Fork River.

Source Water Assessment

A Source Water Assessment was conducted in 2003 by the West Virginia Bureau of Public Health (WVBPH). A Source Water Protection Plan was updated in 2019. The intake that supplies drinking water to the **Clarksburg Water Board** 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 at www.clarksburgwater.com/ or a copy will be provided to you at Clarksburg Water Boards 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 effect.

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.

All 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

The following tables list all of the drinking water contaminants which were detected during the 2021 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2021. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Water Quality Data Table

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.
- **RAA - 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)
- **mrem/yr – Millirems per Year** or a measure of radiation absorbed by the body.
- **ppm** - parts per million or milligrams per liter (**mg/l**)

The **Sun Valley Public Service District** routinely monitors for contaminants in your drinking water according to federal and state laws. The tables below show the results of our monitoring for contaminant.

Tables of Test Results - Regulated Contaminants Sun Valley PSD PWS# WV3301726

Disinfectant						
Contaminant	Violation Y/N	Level Detected	Unit of Measure	MRDLG	MRDL	Likely Source of Contamination
Chlorine	N	RAA 0.986 Range 0.2-1.7	ppm	4	4	Water additive used to control microbes

Disinfection Byproducts	Violation Y/N	Highest LRAA	Range (low/high)	Unit of measure	MCLG	MCL	Likely source of Contamination
*Haloacetic acids (HAA5) 180 Hillshire Dr.	N	34.9	12.4 / 37.5	ppb	NA	60	By-product of drinking water disinfection
**Total trihalomethanes (TTHMs) 180 Hillshire Dr.	N	52.275	13.5/ 114	ppb	NA	80	By-product of drinking water chlorination

*We are required to monitor your drinking water regularly. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the 2nd quarter of 2021 the lab did not return a result for the HAA5 sample that was taken. Therefore, we cannot be sure of the quality of your drinking water during that quarter.

**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.

Lead & Copper - Copper and Lead samples were collected from 10 area residences on September 9 th , 2021							
Contaminant	Monitoring Period	90 th Percentile	Range	Unit	AL	Sites Over AL	Likely Source of Contamination
Copper, Free	2021	0.1002	0.0037 - 0.148	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits.
Lead	2021	2.2	1 – 4.3	ppb	15	0	Corrosion of household plumbing systems; erosion of natural deposits

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 **Sun Valley 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>.

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	System Name	Number	Analyte	Comments
10/1/2021	Sun Valley PSD	2022-511114	Consumer Confidence Report	CCR Adequacy/Availability/Content
4/1/2021 - 6/30/2021	Sun Valley PSD	2021-11452	Haloacetic Acids	Monitoring, Routine (DBP), Major
4/1/2021 – 6/30/2021	Sun Valley PSD	2021-11453	Trihalomethanes	Monitoring, Routine (DBP), Major
1/1/2018 – 12/31/2020	Sun Valley PSD	2022-511113	Public Notice	Public Notice Linked to Violation

Sun Valley PSD received the above violations during the year.

The violations were for paperwork issues and the system personnel are doing all they can to make sure it doesn't happen again.

The Health Effects Language below is required, although there were NO problems with water quality related to the violations.

* Haloacetic Acids: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

*Trihalomethanes: 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.

Some or all of our drinking water is supplied from another water system. The table below lists some of the drinking water contaminants which were detected in 2021. The entire list can be found at www.clarksburgwater.com/

Tables of test results for regulated contaminants: Clarksburg Water Board

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. Clarksburg'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

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					
Date	High	Yearly Range	Unit of measure	TT	Likely Source of Contaminant
2021	2.6	1.3 – 2.6	ppm	0	Naturally occurring in the environment

Clarksburg Water Board collects 288 samples per year to test for bacteria. These samples are collected, not only because it's on the sampling schedule put out by the primacy agency, but to make sure the disinfectant process is working throughout the distribution system. The Water Treatment Operation Specialists at Clarksburg Water Board are some of the best around and work tirelessly to distribute the best water possible within all the parameters set forth by the Environmental Protection Agency. The system collects 24 Chlorine samples every day in the treatment plant and 1 in the distribution system. The results of the Chlorine sampling for 2021 are in the table below.

Disinfectant							
Contaminant	Violation	Level Detected	Range (low/high)	Unit of Measure	MRDLG	MRDL	Likely Source of Contamination
Chlorine (water plant)	No	RAA 1.5	1.2 / 1.8	ppm	4	4	Water additive used to control microbes
Chlorine (distribution)	No	RAA 1.4	1.2 / 1.6	ppm	4	4	Water additive used to control microbes

Disinfection Byproducts							
Contaminant & Sample Site	Violation	Highest LRAA	Range (low/high)	Unit of measure	MCLG	MCL	Likely source of Contamination
Haloacetic acids **(HAA5) Rich Oil	No	45.825	13.8 / 106	ppb	0	60	By-product of drinking water disinfection
Total trihalomethanes *(TTHMs) Rich Oil	No	51.925	22.5 / 101	ppb	0	80	By-product of drinking water disinfection
Haloacetic acids (HAA5) Tri Co. Pit	No	39.95	27.9 / 49	ppb	0	60	By-product of drinking water disinfection
Total trihalomethanes *(TTHMs) Tri Co. Pit	No	66.225	30.1 / 118	ppb	0	80	By-product of drinking water disinfection

Disinfection Byproducts continued							
Haloacetic acids **(HAA5) FBI	No	36.525	20.1 / 60.6	ppb	0	60	By-product of drinking water disinfection
Total trihalomethanes *(TTHMs) FBI	No	60.125	32.7 / 107	ppb	0	80	By-product of drinking water disinfection
Haloacetic acids (HAA5) Mt. State	No	40.575	19.7 / 57.4	ppb	0	60	By-product of drinking water disinfection
Total trihalomethanes *(TTHMs) Mt. State	No	67.0	30.6 / 116	ppb	0	80	By-product of drinking water disinfection

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

** Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of cancer.

Inorganic Contaminants						
Contaminant	Violation	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Antimony	No	0.041	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium	No	0.032	ppm	2	2	Discharge from drilling wastes, discharge from metal refineries, erosion of natural deposits.
Chromium	No	0.001	ppm	0.1	0.1	Discharge from steel and pulp mills; erosion of natural deposits
Contaminant	Violation	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Fluoride	No	0.75	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from aluminum and fertilizer plants

Inorganic Contaminants continued						
Nitrate	No	0.27	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits
Selenium	No	0.00065	ppm	0.05	0.05	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

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
Sulfate	90.9	ppm	250

Radionuclides						
Contaminant	Violation	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contaminant
Gross Alpha, Excluding Radon & U	No	0.086	pCi/L	0	15 pCi/L	Erosion of natural deposits

Lead & Copper - Copper and Lead samples were collected from 30 area residences on June 25 th , 2021 and a second set of 30 samples were collected on August 18 th , 2021							
Contaminant	Monitoring Period	90 th Percentile	Range	Unit	AL	Sites Over AL	Likely Source of Contamination
Copper, Free	2021	0.158	0.014 - 0.89	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits.
Lead	2021	13	0.00 – 140	ppb	15	3	Corrosion of household plumbing systems; erosion of natural deposits

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 **Clarksburg Water Board** 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>.

In the 2021 calendar year, Clarksburg Water Board had the below noted violation(s) of drinking water regulations.

Date	Number	Type / Name	Compliance Period
8/15/2020	2020--133637	71 / CCR Report	7/1/2020-1/25/2021
11/14/2020	2021--133638	72 / CCR Adequacy/Availability/Content	10/1/2020-1/25/2021
2/15/2022	2022--133644	72 / CCR Adequacy/Availability/Content	10/1/2021

Consumer Confidence Report information wasn't adequate and reporting to the primacy agency wasn't done according to the current WV BPH requirements.

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

Additional Information: Clarksburg Water Board

Unregulated Contaminants						
Contaminant	Date Sampled	Level Detected	Unit of Measure	MCLG	SMCL	Likely Source of Contamination
Sodium	1/27/2021	18.6	ppm	NA	1000	Erosion of natural deposits
Nickle	1/27/2021	0.53	ppb	100	100	Erosion of natural deposits
Alkalinity, Total	10/2/2018	50	ppm	NA	10000	NA
Carbon, Dissolved Organic (DOC)	9/9/2020	19.6 Range 1.1-19.6	ppm	NA	NA	NA
Carbon, Total	8/6/2020	2.6 Range 1.3-2.6	ppm	NA	10000	NA
SUVA (Specific Ultraviolet Absorbance)	12/7/2021	1.8 Range 0.17-1.8	L /MG-M	NA	NA	NA
UV Absorbance @254 NM	8/6/2020	0.048 Range 0.01-0.048	CM-1	NA	NA	NA

Sodium is an unregulated contaminant. Anyone having a concern over sodium should contact their primary care provider.

The Clarksburg Water Board had an on-site visit, from the WV Bureau of Public Health, for a Sanitary Survey on January 26, 2021 and no deficiencies were reported.

The Clarksburg Water Board conducted monitoring of contaminants included in the Unregulated Contaminant Monitoring Rule (UCMR) issued by the US Environmental Protection Agency (USEPA). Unregulated Contaminants are those that don't yet have a drinking water standard set by the USEPA. The purpose of monitoring for these contaminants is to help USEPA to decide whether or not the contaminants should have a standard.

USEPA - Unregulated Contaminants Monitoring Rule (UCMR) Schedule

Title	UCM-State Rounds 1&2	UCMR 1	UCMR 2	UCMR 3	UCMR 4
Testing Periods	(1988-1997)	(2001-2005)	(2007-2011)	(2012-2016)	(2017-2021)

Clarksburg Water Board - Unregulated Contaminants Monitoring Rule (UCMR) Results

UCMR 1-Sampled 2002	No Detects on any samples
UCMR 2-Sampled 2010	No detects on any samples

UCMR 3-Sampled 2013 & 2014

Date	Site	Contaminant	Level detected	Unit of Measure
2013	Plant Effluent	Chlorate	32	µg/l
		Strontium	163.1	µg/l
	Distribution Site	Strontium	157.1	µg/l
		Chromium 6	0.03	µg/l
		Chlorate	33	µg/l

Feb-14	Plant Effluent	Chlorate	69	µg/l
		Chromium 6	0.05	µg/l
		Strontium	105	µg/l
	Distribution Site	Chlorate	92	µg/l
		Chromium 6	.05	µg/l

May-14	Plant Effluent	Strontium	123.3	µg/l
		Chromium	0.05	µg/l
		Molybdenum	1	µg/l
		Strontium	124.4	µg/l
	Distribution Site	Vanadium	0.3	µg/l
		Chromium	0.2	µg/l

Aug-14	Plant Effluent	Chromium 6	0.06	µg/l
		Strontium	157.2	µg/l
		Chlorate	27	µg/l
		Chromium	0.04	µg/l
		1,4-Dioxane	0.41	µg/l
	Distribution Site	Chlorate	27	µg/l
		Chromium	24	µg/l
		Chromium 6	0.08	µg/l
		Strontium	153.4	µg/l

*UCMR 4-Sampled 2018 & 2019	No Detects on any samples
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Additional Information – Sun Valley Public Service District

All other water test results for the reporting year 2021 were all non-detects.

This report will not be mailed. A copy will be provided to you upon request at our office during regular business hours.

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).