Annual Drinking Water Quality Report 2023
Greater Harrison County PSD
151 Peninsula Park Avenue
P.O. Box 190
West Milford, WV 26451
Valley of Good Hope PWSID# WV3301727
May 22, 2024

In compliance with the Safe Drinking Water Act Amendments, the Greater Harrison 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 Julia Childers, Chief Operator, Monday through Friday (7:30am - 3:30pm) at 304-745-3463. If you have any further questions, comments or suggestions, please attend any of our regularly scheduled water board meetings held on the 3^{rd} Wednesday of every month at 9:00 AM in the West Milford Community Building.

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

A Source Water Protection Plan was updated in 2023. 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.

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 stormwater 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.

The Greater Harrison County Public Service District, Valley of Good Hope division routinely monitor 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 - Valley of Good Hope

Disinfectant									
Contaminant	Violation Y/N	Level Detected	Unit of Measure	MRDLG	MRDL	Likely Source of Contamination			
Chlorine	N	RAA 1.17	ppm	4	4	Water additive used to control microbes			
		Range 0.21-2.2							

Disinfection Byproducts	Violation Y/N	Highest LRAA	Range (low/high)	Unit of measure	MCLG	MCL	Likely source of Contamination
Haloacetic acids (HAA5) 43 Recreation Dr (Site 1)	N	40.25	14 / 59	ppb	NA	60	By-product of drinking water disinfection
*Total trihalomethanes (TTHMs) 1570 Cabin Run Rd (Site 2)	N	83.75	28 / 116	ppb	NA	80	By-product of drinking water chlorination

^{*}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 cancer.

UN-REGULATED						
Contaminant	Violation Y/N	RAA	Range	Unit of Measure	SMCL	Likely Source of Contamination
Orthophosphate	N	5.208	4.26 – 5.62	ppm	NA	Additive to control lead leaching from old pipe

	Lead and Copper - Copper and Lead samples were collected from 20 area residences on May 31st and December 20th, 2023										
Contaminant	90% of Test	Ideal Goal	EPA's Action	Number of Tests	Typical Sources	Violation					
	Levels Were	(MCLG)	Level	With Levels							
	Less Than			Above EPA's							
				Action Level							
					Corrosion of						
	0.365	1.3 ppm	90% of homes	0 - out of 10	household	No					
Copper, Free	ppm		less than 1.3 ppm		plumbing						
					Corrosion of						
Lead	0.74	0 ppb	90% of homes	0 - out of 10	household	No					
	ppb		less than 15 ppb		plumbing						

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 **Greater Harrison County PSD (Valley of Good Hope)** 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 2023 calendar year, we had the below noted violation(s) of drinking water regulations.

Date Issued	Number	Code / Type	Monitoring Period
4/8/2023	544437	02 / MCL, LRAA	1/1/2023 – 3/31/2023
5/16/2023	544438	35 / Failure to Submit OEL Report - TTHM	4/1/2023
5/16/2023	544439	20 / Failure to Respond, IESWTR	2/6/2023 – 3/7/2023
6/16/2023	544440	75 / Public Notice Rule linked to violation	1/1/2023 - 3/31/2023
9/16/2023	544441	66 / Lead Consumer Notice (LCR)	1/1/2022 - 6/30/2022
11/16/2023	544442	72 / CCR Adequacy/ Availability/ Content	10/1/2023
2/16/2024	544443	WB / Failure to Complete or Submit MOR	12/1/2023 - 12/31/2023
2/16/2024	544444	27 / Monitoring, Routine (DBP), Major	12/1/2023 - 12/31/2023
2/16/2024	544445	3A / Monitoring, Routine, Minor (RTCR)	12/1/2023 - 12/31/2023

The system operation specialists have made every effort and taken every precaution to return to compliance.

Some or all of our drinking water is supplied from another water system. The tables below list the drinking water contaminants which were detected in 2023.

Testing Results for: CLARKSBURG WATER BOARD

Microbiological	Result	MCL	MCLG	Typical Source					
No Detected Results were Found in the Calendar Year of 2023									

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	3/3/2023	0.03	0.03	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	3/3/2023	3	3	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
FLUORIDE	3/3/2023	0.43	0.43	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	3/3/2023	1.2	1.2	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	3/3/2023	1.2	1.2	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	HYDRANT FOR TC LINE FLUSH SALTWELL	2023	49.3	27.8 – 43.4	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	SITE 1 MTN STATE ELEC 2121 SALTWELL RD	2023	48.55	26.7 – 44.5	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	SITE 2 FBI	2023	48.9	25.5 – 42.1	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	SITE 3 RICH OIL	2023	36.53	16.8 – 32.3	ppb	60	0	By-product of drinking water disinfection
ТТНМ	HYDRANT FOR TC LINE FLUSH SALTWELL	2023	78.2	30.5 – 87.4	ppb	80	0	By-product of drinking water chlorination
ТТНМ	SITE 1 MTN STATE ELEC 2121 SALTWELL RD	2023	75.05	30.1 – 85.6	ppb	80	0	By-product of drinking water chlorination
TTHM	SITE 2 FBI	2023	69.33	25.9 – 61.4	ppb	80	0	By-product of drinking

								water chlorination
ТТНМ	SITE 3 RICH OIL	2023	45.75	15 – 53.4	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2023	0.0485	<0.005 - 0.086	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2023	5.39	<2 - 10	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. Your water system 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.

CLARKSBURG WATER BOARD is working towards identifying service line materials throughout the water distribution supply. The service line inventory is required to be submitted to the state by October 16, 2024. The most up to date inventory is located at Clarksburg Water Board office, if you have any questions about our inventory, please contact JASON L. MYERS at 304-623-3711.

CLARKSBURG WATER BOARD tested numerous other contaminants, both regulated and un-regulated, that were either NON-DETECT or below the current Reporting Limits (RL) set by the regulatory agencies. Including the UCMR-5 testing required by EPA.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
January 2022	1 21	340/	4.0	MOD
January 2023	1.31	MG/L	1.2	MG/L

Total Organic Carbon (RAW)	Collection Date	Highest Value	RAA	Range	Unit	π	Typical Source
CARBON, TOTAL	2023	5.7	3.2	2-5.7	MG/L	0	Naturally present in the environment

Total Organic Carbon (Finished)	Collection Date	Highest Value	RAA	Range	Unit	π	Typical Source
CARBON, TOTAL	2023	3.1	2.1	1.6 – 3.1	MG/L	0	Naturally present in the environment

The LOWEST Month of Removal was January 2023 and the sample was collected on 1/12/2023.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
TURBIDITY	TREATMENT PLANT	0.15	NTU	JUL 2023

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source	
No Detected Results were Found in the Calendar Year of 2022								

Un-Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	3/3/2023	13.5	13.5	ppm	1000
OORTHOPHOSPHATE	2023	4.5	3.2 – 4.5	ppm	N/A

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL	
ALKALINITY, TOTAL	4/25/2023	99	23 - 99	MG/L	10000	
CALCIUM	4/25/2023	70.8	32.8 – 70.8	MG/L		
CALCIUM HARDNESS	4/25/2023	177	75 - 177	MG/L		
CARBON, DISSOLVED ORGANIC (DOC RAW)	8/1/2023	4.4	1.4 – 4.4	MG/L		
CARBON, DISSOLVED ORGANIC (DOC FINISHED)	8/1/2023	2.9	1.1 – 2.9	MG/L		
CARBON, TOTAL (RAW)	9/12/2023	5.7	1.4 – 5.7	ppm	10000	
CARBON, TOTAL (FINISHED)	8/1/2023	3.1	1.1 – 3.1	ppm	10000	
CONDUCTIVITY @ 25 C UMHOS/CM	4/25/2023	469	0.229 - 469	UMHO/CM		
CRYPTOSPORIDIUM	3/20/2018	1	0-1			
GIARDIA LAMBLIA	9/18/2018	1	0-1	11		
HARDNESS, CALCIUM MAGNESIUM	7/12/2021	133	78 - 133	MG/L		
PH	3/6/2023	8.1	7.5 - 8.1	SU	8.5	
SULFATE	3/3/2023	62.3	62.3	MG/L	250	
SUVA (SPECFIC ULTRAVIOLET ABSORBANCE) RAW	9/12/2023	7.3	2.5 – 7.3	L/MG-M		
SUVA (SPECFIC ULTRAVIOLET ABSORBANCE) FINISHED	11/3/2023	2.3	1-2.3	L/MG-M		
TEMPERATURE (CENTIGRADE)	8/23/2023	81	39 - 81	F		
UV ABSORBANCE @254 NM (RAW)	8/1/2023	0.055	0.02 - 0.055	CM-1		
UV ABSORBANCE @254 NM (FINISHED)	8/1/2023	0.182	0.04 - 0.182	CM-1		

During the 2023 calendar year, we had NO noted violation(s) of drinking water regulations.

Additional Required Health Effects Language:

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to 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 central nervous systems, and may have an increased risk of getting cancer.

There are no additional required health effects violation notices.

Water System	Туре	Category	Analyte	Compliance Period					
No Violations Occurred in the Calendar Year of 2023									

The West Virginia Bureau for Public Health performed a Sanitary Survey on June 29, 2022 and no Significant Deficiencies were reported.

Additional Information

Valley of Good Hope had *One Significant Deficiency* on the last Sanitary Survey performed by the West Virginia Bureau for Public Health on December 6, 2022.

1. Good Hope Tank coating is in poor condition.

Greater Harrison County PSD is in the planning stage of replacing the water tank.

Greater Harrison County PSD – Valley of Good Hope is working towards identifying service line materials throughout the water distribution supply. The service line inventory is required to be submitted to the state by October 16, 2024. The most up to date inventory is located at **the Main Office located at 151 Peninsula Park Ave.**, West Milford. If you have any questions about our inventory, please contact Matt Evans at 304-745-3463.

All other water test results for the reporting year 2023 were all non-detects or below the current Reporting Limits.

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 BUSINESS).

This report will not be mailed. A copy will be provided to you upon request at our office during regular business hours. A digital copy can be found at the Direct Access URL of greaterharrison.com/ccr5.