

2021

Annual Drinking Water Report

Martinsburg Municipal Authority

PWSID # 4070030

MANDATORY STATEMENT: This report contains very important information about your drinking water. Translate it, or speak with someone who understands it. (*Este informe contiene informacion importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.*)

One of the Federal Safe Drinking Water Act Amendments of 1996 is a right-to-know requirement. The Environmental Protection Agency published the final Consumer Confidence Report rule on August 19, 1998 to satisfy this amendment. Until the Pennsylvania Department of Environmental Protection (PA DEP) has a similar regulation in place, community water systems must comply with the Federal EPA regulations. This report is a summary from analysis results of water samples that were obtained from the Martinsburg system for the 2018 reporting year. Some people may be more vulnerable to contaminants in drinking water than the general population. An Immuno-compromised person, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants, can be particularly at risk. These people should seek advice about all drinking water from their health care providers. All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man-made. Those constituents can be microbes, organic or inorganic chemicals or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Water Hotline at 1-800-426-4791.

If you have questions about this report or concerning your water service, please contact Richard Brantner Jr. at the Martinsburg Municipal Building, 110 South Walnut Street, Martinsburg, PA 16662, by phone at 793-3213. The regularly scheduled meetings of the Martinsburg Municipal Authority are held on the Third Thursday of each odd numbered month at 7:00 pm in the Martinsburg Municipal Building located at 110 South Walnut Street, Martinsburg, PA.

The Martinsburg Municipal Authority routinely monitors for contaminants in your drinking water according to federal and state laws. The following table shows the results of our monitoring for the period of January 1 to December 31, 2021. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. These dates have been noted on the sampling results table.

The Municipal Authority is currently drawing its water from the Wineland Well Field consisting of three wells located just east of the Borough of Martinsburg and the Hershberger Well located on South Walnut Street. All of these wells have been classified by the PA DEP as ground water sources. In 2021 the average daily water flow into our system was 387,600 gallons per day.

A Source Water Assessment of our sources was completed by the PA DEP. The Assessment has found that our sources are potentially most susceptible to agricultural sources of contamination. Overall, our sources have little risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment & Protection web page at:

<http://www.dep.state.pa.us/dep/deputate/watermat/wc/Subjects/SrceProt/SourceAssessment/default.htm>

Complete reports were distributed to municipalities, water supplier, local planning agencies and PA DEP offices. Copies of the complete report are available for review at the PA DEP South Central Regional Office, Records Management Unit at (717) 705-4708

DEFINITIONS:

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$ 10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$ 10,000,000.

Picocuries per liter (pCi/l) - a measure of the radioactivity in water.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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 technology.

Maximum Contaminant Level Goal - The "Goal" (MCLG) is 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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Inorganic Contaminants - (IOC) includes metals

Synthetic Organic Chemicals - (SOC) includes pesticides and herbicides

Volatile Organic Contaminants - (VOC) includes industrial chemicals

Contaminant	Level detected
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2020 Synthetic Organic Chemicals

28 Tested	0
PCB's	0

2020 Volatile Organic Contaminants

Benzene	0
Carbon Tetrachloride	0
Chlorobenzene	0
1,2-Dichlorobenzene	0
1,4-Dichlorobenzene	0
1,2-Dichloroethane	0
1,1-Dichloroethylene	0
cis-1,2-Dichloroethylene	0
trans- 1,2-Dichloroethylene	0
Methylene Chloride	0
1,2,-Dichloropropane	0
Ethylbenzene	0
Styrene	0
Tetrachloroethylene	0
1,2,4,-Trichlorobenzene	0
1,1,1-Trichloroethane	0
1,1,2-Trichloroethane	0
Trichloroethylene	0
Toluene	0
Vinyl Chloride	0
Xylenes	0

2021 Inorganic Contaminants	MCL
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101 Barium	0.0359	2
102 Barium	0.0519	2

2015 Radiological Contaminants

Gross Alpha-Radiological Suite	0
Radium 226	0

2016 Synthetic Organic Chemicals

Atrazine	0
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Detected Sample Results

Note: MCL's are set at very stringent levels for health effects. A person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having a related health effect.

Contaminant	Violation Y/N	Level Detected	Unit of Measurement	Range	MCLG	MCL	Sources of Contamination
Chlorine 2021	N	0.81	PPM	0.65 - 0.81	(MRDLG) 4.0	(MRDL) 4.0	Water additive to control microbes
*101 - Nitrate 2021	N	1.81	PPM	0.0 - 1.81	10	10	Erosion of natural deposits, farming practices
**102 - Nitrate 2021	N	4.99	PPM	4.08 - 4.99	10	10.0	Erosion of natural deposits, farming practices
Trihalomethanes 2021	N	2.82	PPB	0.87 - 1.06	N/A	80 PPB	By-product of drinking water chlorination
Haloacetic 2021	N	0		0.0-0.0	N/A		By-product of drinking water chlorination

Nitrate can be found in water in many rural Pennsylvania communities and is the primary source of nitrogen for plants. Although this contaminant is known to originate from various sources, agricultural practices are generally considered to be the most common source of contamination. Nitrate in drinking water at levels above 10 ppm is a health concern for infants of less than six months of age. High nitrate levels above 10 ppm in drinking water can cause "blue baby" syndrome. If you are caring for an infant and have concerns about nitrate in drinking water you should ask for advice from your health care provider.

The Martinsburg Municipal Authority has completed construction of a 1.7 million dollar Nitrate Removal Facility to remove the nitrates from the drinking water at the Wineland Well Field. The Facility is operating per its design since being placed on line July 21, 2011.

Entry Point Disinfectant Residual

Contaminant	Minimum Disinfectant	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation	Sources of Contaminant
*101 - Chlorine	0.40	0.66	0.66 - 1.46	ppm	3/16/2021	N	Water additive used to control microbes
**102 - Chlorine	0.40	0.58	0.58 - 1.26	ppm	1/4/2021	N	Water additive used to control microbes

Contaminant	Violation Y/N	Number of Positive samples per month	MCL	MCLG	Sources of Contamination
Total coliform bacteria	N	0	5% or more monthly positive samples	0	Naturally present in the environment
Fecal coliform or E-Coli	N	0	routine sample and repeat sample are total coliform positive and one is also fecal coliform or E-coli positive	0	human and animal fecal waste

Contaminant	Violation Y/N	Level Detected	Unit of Measurement	No. of sites above AL	Action Level (AL)	MCLG	Sources of Contamination
Lead 2019	N	0.00	ppb	0	15 ppb	0	Corrosion of household plumbing
Copper 2019	N	0.127	ppm	0	1.3 ppm	1.3 ppm	Corrosion of household plumbing

"If present, elevated levels of lead can cause serious 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 Martinsburg Municipal Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. Samples are taken from homes with copper water lines and solder joints installed prior to the lead solder ban. 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>."

*Wineland Well Field (101)

**Hershberger Well Field (102)

110 South Walnut Street
Martinsburg, PA 16662

Telephone (814) 793-3213
Fax (814) 793-4829

WATER FACTS

WATER DEMAND: In 1900, each of the six million people living in Pennsylvania used about five gallons of water per day. Since then, our population has risen to 12.7 million people, and our water consumption has increased to an average of 62 gallons per day.

Water is an important natural resource. We use it everyday at home and at work in so many ways that we take it for granted. However, water is no longer the "sure thing" that it was in the past. We need to reassess our uses of water and how to conserve it.

AVERAGE DAILY WATER USE: Be aware of how much water you use! Awareness is the first step in conservation. The following table indicates how much water the average person in Pennsylvania uses each day.

Use*	Gallons Per Day	Percent
Toilet Flushing	20	32
Clothes Washing	16	26
Showering and Bathing	14	23
Kitchen (dishwashing, cooking drinking, cleaning)	12	19
	62	100

*This information is provided for illustrative purposes only and may not be applicable to a given situation.

The following chart highlights how much water can be conserved by installing water saving equipment in place of conventional plumbing fixtures, fittings and appliances.

POTENTIAL WATER SAVINGS		
Fixture/Appliance	Capacity	
	Efficient	Conventional
Toilets	1.6 gpf	5.5 – 7.0 gpf
Showerheads	2.5 (1.7) gpm	5.0 – 8.0 (3.4) gpm
Faucets	2.5 (1.7) gpm	3.0 – 7.0 (3.3) gpm
Dishwashers	4.5 – 5.5 gpl	9.0 – 13.7 gpl
Washers – Front Loading	27 – 30 gpl	
– Top loading	30 – 33 gpl	37 – 47 gpl

Gallons Per Minute = gpm

Gallons Per Flush = gpf

Gallons Per Load = gpl

REPAIR ALL LEAKS: A dripping faucet is more than annoying...it's expensive. Even small leaks can waste significant amounts of water. Hot water leaks are not only a waste of water, but also of the energy needed to heat the water.

Leaks inside a toilet can waste up to 200 gallons of water a day. Toilet leaks can be detected by adding a few drops of food coloring to water in the toilet tank. If the colored water appears in the bowl, the tank is leaking. If you have a leaking faucet or toilet, stop pouring money down the drain and repair it.

THANK YOU for using water wisely!