Annual Drinking Water Quality Report

MD0070018 TOWN OF PERRYVILLE

Annual Water Quality Report for the period of January 1 to December 31, 2021

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

TOWN OF PERRYVILLE is Surface Water

For more information regarding this report contact:

Name: Jeff Morton

Phone: 410-642-6142

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the 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.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

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, or 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 be the result of oil and gas production and mining activities.

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 for contaminants in bottled water which must provide the same protection for public health.

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 system 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).

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. We are responsible for providing high quality drinking water, but we 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.

Source Water Information

SWA = Source Water Assessment

Source Water Name		Type of Water	Report Status	Location
SUSQUEHANNA RIVER	01-SUSQUEHANNA	SW	Y	

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1		0	N	Naturally present in the environment.

Lead and Copper

Definitions:
Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Lead and Copper	Likely Source of Contamination
Copper	2021	1.3	1.3	0.089	0	ppm	Copper	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2021	0	15	2	0	ppb	Lead	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Maximum Contaminant Level or MCL:	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.
Level 1 Assessment:	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Maximum Contaminant Level Goal or MCLG:	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.
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation

Water Quality Test Results

	has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum residual disinfectant level or 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 or 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 contaminants.
na:	not applicable.
mrem:	millirems per year (a measure of radiation absorbed by the body)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2021	0.3	0.2 - 0.3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2021	36	13.77 - 55.6	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2021	67	21.2 - 98.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2021	0.024	0 - 0.024	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2021	1	0 - 1	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2021	1	0.6 - 1.29	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	05/25/2016	7.3	7.3 - 7.3	0	50	pCi/L	N	Decay of natural and man-made deposits.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.077 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration

Violations Table

Lead and Copper Rule			
The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosively. Lead and copper enter drinking water mainly from corrosion oflead and copper containing plumbing materials.			
Violation Type	**Violation Begin**	**Violation End**	**Violation Explanation**
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2021	11/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sui of the quality of our drinking water during the period indicated.

"PFAS- short for polyfluoroalky substance-refers to a large group of more than 4000 human made chemicals that have been used since the 1940sin a range of products, Including stain-and water- resistant fabrics and carpeting, cleaning products, paint, cookware, food packaging, and fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they can be measured by several states in soil, surface water, groundwater and seafood. Some PFAS can last a long time in the Environment and in the human body and can accumulate in the food chain.

Currently there are no federal regulations (i.e. Maximum Contaminate Levels (MCLs) for PFAS in drinking water. However the U.S. Environmental Protection Agency (EP Has issued a Health Advisory Level (HAL) of 70 parts per trillion (ppt) for the sum of PFOA and PFOS concentrations in drinking water. While not an enforceable regulato Standard, when followed, the EPA Hal does provide drinking water customers, even the most sensitive populations, with a margin of protection from lifetime exposure to PFOA and PFOS in drinking water. Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. The combined PFOA And PFOS concentration from samples taken from our water system was ("below the detection limit"). MDE anticipates that EPA will establish an MCL for PFOA and PFOS in the near future. This would entail additional monitoring. Additional information about PFAS can be found on the MDE website: mde.maryland.gov

A source water assessment has been performed by the Maryland Department of the Environment and is accessible on their website at: http://mde.maryland.gov./programs/Water/water supply/Source Water Assessment Program/pages/by county.aspx

MARYLAND DEPARTMENT OF THE ENVIRONMENT

WATER SUPPLY PROGRAM

1800 Washington Blvd. Baltimore, MD 21230

(410) 537-3729 (800) 633-6101ext. 3729 http://www.mde.maryland.gov

INORGANIC SELF-MONITORING REPORT

SAMPLED FOR COMPLIANCE: (YES/NO) ___

PWSID MD 007-0018 SYSTEM NAME Susquehanna Water Treatment Plant COUNTY Cecil

LAB SAMPLE ID 1C04801-01

SAMPLE TYPE (Choose One): ROUTINE X REPEAT ____ SPECIAL ____ CONFIRMATION ____

SAMPLE POINT ID* POE SAMPLE LOCATION Lab Sink

SAMPLE SITE ADDRESS 1507 Frenchtown Road Perryville Maryland

COLLECTION DATE 4/5/21 TIME 8:05 AM

LAB CERT#: 347 LABORATORY Suburban Testing Labs PHONE 610-375-8378

SAMPLER ID 0994LF SAMPLER NAME Larry W. Frazier PHONE 410-378-3883

REMARKS:

Analyte Name	Analyte Code	MCL (mg/l)	Result (mg/l)	Reporting Level (mg/l)	Method Code	Analysis Date
Nitrate	1040	10	1.29	1.00	300.0	4/6/21
Nitrite	1041	1	<0.10	0.10	300.0	4/6/21
Nitrate+Nitrite	1038	10				
Antimony	1074	0.006	<0.0004	0.0004	200.8	4/13/21
Arsenic	1005	0.010	<0.001	0.001	200.8	4/13/21
Barium	1010	2	0.024	0.010	200.8	4/13/21
Beryllium	1075	0.004	<0.0005	0.0005	200.8	4/13/21
Cadmium	1015	0.005	<0.0008	0.0008	200.8	4/13/21
Chromium	1020	0.1	0.001	0.001	200.8	4/13/21
Cyanide	1024	0.2				
Fluoride	1025	4.0	<0.20	0.20	300.0	4/6/21
Mercury	1035	0.002	<0.0002	0.0002	SM3112-B	4/8/21
Nickel	1036	------	<0.001	0.001	200.8	4/13/21
Selenium	1045	0.05	<0.002	0.002	200.8	4/13/21
Sodium	1052	----	12.0	1.00	200.7	4/16/21
Thallium	1085	0.002	<0.0004	0.0004	200.8	4/13/21
Unregulated						
Sulfate	1055		16.8	5.00	300.0	4/6/21

* SAMPLE POINT ID: For water treatment plants: TP + Plant ID (example:TP01)
For source/raw water examples: Well (WL + Source ID=WL01) Reservoir (RS+Source ID=RS01)

I do hereby affirm that this record contains no willful misrepresentations or falsifications and that this information given by me is true to the best of my knowledge and belief. I further certify that the methods and quality control measures used to produce these laboratory results were implemented in accordance with the requirements of this laboratory's certification under COMAR 26.08.05.

SIGNED Larry W. Frazier DATE 4/22/21

Mail to:

MARYLAND DEPARTMENT OF THE ENVIRONMENT

WATER SUPPLY PROGRAM

1800 Washington Blvd., STE. 450, Baltimore, Maryland 21230-1708
(410) 537-3729 (800) 633-6101 ext. 3729 http://www.mde.state.md.us

SYNTHETIC ORGANIC SELF-MONITORING REPORT

PWSID MD007-0018 SYSTEM NAME Town of Perryville COUNTY Cecil
PLANT ID MD007-0018 PLANT NAME Susquehanna Water Filtration Treatment Plant
SAMPLE SITE ADDRESS 1507 Frenchtown Road Perryville, MD. 21903
SAMPLE TYPE: RAW _____ FINISHED X SAMPLE LOCATION(well, sample tap, sink,etc.) Lab Sink
DATE COLLECTED 9/27/21 TIME 7:20 AM
SAMPLER ID 0990JF SAMPLER NAME Justin J. Fain PHONE 410-378-3883
LAB CERT#: 347 LABORATORY Suburban Testing Labs PHONE 610-375-8378
LAB SAMPLE ID 1I04677-01 RECEIVED 9/27/21 REPORTED 9/30/21&10/7/21
REMARKS:

Contaminant	EPA ID	MCL (ppb)	Actual Level (ppb)	Sample Preservation	EPA Analytic Method Used	Analysis Date
Alachlor	2051	2	<0.50	Yes	525.2	10/7/21
Atrazine	2050	3	<0.25	Yes	525.2	10/721
Carbofuran	2046	40				
Chlordane	2959	2	<0.05	Yes	525.2	10/721
DBCP	2931	0.2			504	
2,4-D	2105	70				
EDB	2946	0.05			504	
Heptachlor	2065	0.4	<0.10	Yes	525.2	10/721
Heptachlor epoxide	2067	0.2	<0.05	Yes	525.2	10/7/21
Lindane	2010	0.2	<0.05	Yes	525.2	10/7/21
Methoxychlor	2015	40	<0.25	Yes	525.2	10/7/21
PCB	2383	0.5	<0.2000	Yes	505	9/30/21
Pentachlorophenol	2326	1				
Toxaphene	2020	3	<2.000	Yes	505	9/30/21
2,4,5-TP	2110	50				

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SIGNED _____ DATE 10/15/20

SOC/MDE/WMA/COM.007 (02/04)

TTY Users 1-800-735-2258

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ORGANIC SELF-MONITORING REPORT (CONT)

PHASE V AND UNREGULATED ORGANIC

Contaminant	EPA ID	MCL (ppb)	Actual Level (ppb)	Sample Preservation	EPA Analytic Method Used	Analysis Date
Aldicarb	2047	3				
Aldicarb sulfoxide	2043	4				
Aldicarb sulfone	2044	2				
Dalapon	2031	200				
Dinoseb	2041	7				
Diquat	2032	20			549	
Endothall	2033	100			548	
Endrin	2005	2	<0.25	Yes	525.2	10/7/21
Glyphosate	2034	700			547	
Oxamyl(Vydate)	2036	200				
Picloram	2040	500				
Simazine	2037	4	<0.18	Yes	525.2	10/7/21
Benzo(a)pyrene	2306	0.2	<0.05	Yes	525.2	10/7/21
Di(ethylhexyl)adipate	2035	400	<1.50	Yes	525.2	10/7/21
Di(ethylhexyl)phthalate	2039	6	<1.50	Yes	525.2	10/7/21
Hexachlorobenzene	2274	1	<0.25	Yes	525.2	10/7/21
Hexachlorocyclopentadiene	2042	50	<0.25	Yes	525.2	10/7/21/21
2,3,7,8-TCDD (Dioxin)	2063	$3x10^{-5}$			513	
Unregulated Contaminants						
Aldrin	2356					
Butachlor	2076					
Carbaryl	2021					
Dicamba	2440					
Dieldrin	2070					
3-Hydroxycarbofuran	2066					
Methomyl	2022					
Metolachlor	2045					
Metribuzin	2595					
Propachlor	2077					

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SIGNED Larry W. Lynn DATE 10/15/21