Maryland
Department of
the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

Consumer Confidence Report Certification

Water System Name: Town of Rising Sun, Md

Water System Number: MD0070021

I confirm that the Consumer Confidence Report (CCR) for the year **2020** has been delivered to customers (and appropriate notices of availability have been given) in accordance with COMAR 26.04.01.20-2 by ***July 1, 2021***. I further certify that the report is correct and consistent with compliance monitoring data previously submitted to the Maryland Department of the Environment (MDE). Submit completed form to watersupply.sampleresults@maryland.gov.

Certified by (print name): JUDY C MELTON

Certified by (signature): Judy C Melton Date 7/13/2021

Title: Clerk Treasurer

Telephone: 410 658 5353 Email: jmelton@risingsunmd.org

CCR delivery information (must include completion dates for all applicable delivery actions; see reverse for delivery requirements):

Date CCR was delivered to MDE 8/4/2021

Date CCR was delivered to customers 7/30/2021

Indicate method(s) used to deliver CCR to customers:

- ☑ Postal mail
- ☐ Electronic delivery*. Describe electronic delivery method: DOCUMENT LOCATOR #
  *(*An electronic delivery plan must be approved by MDE prior to implementation of electronic delivery.)*
- ☐ Other delivery methods (e.g., door-to-door delivery, posting in an appropriate location). Describe delivery method: _____

Date a notice of CCR availability was published N/A

Date CCR published in local newspaper (attach copy) N/A

Date CCR delivered to other agencies (if required by the State) _____ Attach list or description (optional).

"Good faith" efforts:

Indicate the date(s) that any of the following "good faith" efforts were used to reach non bill-paying consumers:

- 7/13/2021 CCR posted on the Internet (include Internet address: WWW.RISINGSUNMD.ORG)
- _____ CCR mailed to postal patrons (bulk mail) within the service area (attach zip codes).
- _____ Advertising availability of the CCR in news media (attach copy of announcement). IN THE NEWS
- _____ CCR published in local newspaper (attach copy).
- _____ Delivery of multiple copies to single bill addresses serving several persons, such as apartments, businesses, and large private employers.
- _____ Delivery to community organizations (attach a list).
- _____ Other (describe delivery method): _____

Tier 3 Public Notices:

Check here ☐ if a monitoring or reporting violation public notice, fluoride secondary maximum contaminant level notice, special notice for the availability of unregulated contaminant monitoring date, or other Tier 3 Public Notice was included with the CCR.

Mandatory for systems serving 100,000 or more persons:

CCR must be posted on a publicly accessible Internet site. Indicate the date the CCR was made available on the Internet: N/A . Include Internet address: _____

Code of Maryland Regulations (COMAR)
26.04.01.20-2 Consumer Confidence Report Delivery

(G.) Report Delivery and Record Keeping.

(1) Except as provided in §H of this regulation, each supplier of water to a community water system shall mail or otherwise directly deliver* one copy of the report to each customer.

(2) The supplier of water to a community water system shall make a good faith effort to reach consumers who do not get water bills, using means recommended by the State. Good faith effort will be tailored to the consumers who are served by the system but are not bill-paying customers, such as renters or workers. A good faith effort to reach consumers would include a mix of methods appropriate to the particular system such as: posting the reports on the Internet; mailing to postal patrons in metropolitan areas; advertising the availability of the report in the news media; publication in a local newspaper; posting in public places such as cafeterias or lunch rooms of public buildings; delivery of multiple copies for distribution by single-biller customers such as apartment buildings or large private employers; or delivery to community organizations.

(3) Not later than the date the system is required to distribute the report to its customers, each supplier of water for a community water system shall mail a copy of the report to the State, followed within 3 months by a certification that the report has been distributed to customers, and that the information is correct and consistent with the compliance monitoring data previously submitted to the State.

(4) Not later than the date the system is required to distribute the report to its customers, each community water system shall deliver the report to any other agency or clearinghouse identified by the State.

(5) Each community water system shall make its reports available to the public upon request.

(6) Each community water system serving 100,000 or more persons shall post its current year's report to a publicly accessible site on the Internet.

(7) Any supplier of water subject to this regulation shall retain copies of its consumer confidence report for no less than 3 years.

SYSTEMS SERVING < 10,000

(H.) The requirement of §G(1), (5) and (6) of this regulation for a supplier of water to a community water systems serving less than 10,000 persons has been waived. Such systems shall:

(1) Publish the reports in one or more local newspapers serving the area in which the system is located;

(2) Publish a notice in the newspaper, or by other means approved by the State, that informs the customers that the reports will not be mailed; and

(3) Make the reports available to the public upon request.

SYSTEMS SERVING ≤ 500

(I.) Supplier of water to systems serving 500 or fewer persons may forego the requirements of paragraphs §H (1) and (2) if they provide notice at least once per year to their customers by mail, door-to-door delivery or by posting in an appropriate location that the report is available upon request.

** Electronic delivery may be used to fulfill direct delivery requirements. However, each water system must obtain approval from MDE prior to implementation of electronic delivery. Refer to the following document for information regarding acceptable electronic delivery methods: https://www.epa.gov/ccr/how-water-utilities-can-electronically-delivery-their-ccr*

IMPORTANT INFORMATION

The following pages comprise the Annual Consumer Confidence Report (CCR) for your water system.

To download the CCR into your word processing program, follow these steps. Remember you must have the document set up in Landscape Orientation.

* Choose Select All from the edit drop down MENU. (it will highlight all the information)
* Choose Edit from the Menu, select Copy from the edit dropdown Menu.
* Open your word processing program.
* Choose Edit from the MENU, select Paste from the edit dropdown MENU and the information wlll transfer.
* Choose Edit from the Menu.

In order to meet all the requirements of the CCR, you must include the following additional information if it pertains to your water system.

* The report must include the telephone number of the owner, operator, or designee of the community water system as a source of additional information concerning the report.

* In communities with a large proportion of non-English speaking residents, as determined by the Primacy Agency, the report must contain information in the appropriate language(s) regarding the importantce of the report or contains a telephone number or address where such residents may contact the system to obtain a translated copy of the report and/or assistance in the appropriate language.

* The report must include information about opportunities for public participation in decisions that may affect the quality of the water (e.g., time and place of regularly scheduled board meetings).

* If your water system purchases water from another source, you are required to include the current CCR year's Regulated Contaminants Detected table from your source water supply.

* If your water system had any violations during the current CCR Calendar year, you are required to include an explanation of the corrective action take by the water system.

* If your water system is going to use the CCR to deliver a Public Notification, you must include the full notice and return a copy of the CCR and Public Notice with the public Notice. This is in addition to the copy and certification form required by the CCR Rule.

* The information about likely sources of contamination provided in the CCR is generic. Specific information regarding contaminants may be available in sanitary surveys and source water assessments and should be used when available to the operator.

* If a community water system distributes water to its customers from multiple hydraulically independent distribution systems fed by different raw water sources, the table should contain a separate column for each service area, and the report should identify each separate distribution system. Alternatively, systems may produce separate reports tailored to include data for each service area.

* Detections of unregulated contaminants for which monitoring is required are not included in the CCR and must be added. When added, the information must include the average and range at which the contaminant was detected.

* If a water system has performed any monitoring for Cryptosporidium, including monitoring performed to satisfy the requirements of the Information Collection Rule [ICR] (141.143), which indicates that Cryptosporidium may be present in the source water or the finished water, the report must include: (a) a summary of the results of the monitoring; and (b) an explanation of the significance of the results.

* If a water system has performed any monitoring for radon which indicate that radon may be present in the finished water, the report must include: (a) The results of the monitoring; and (b) An explanation of the significance of the results.

* If a water system has performed additional monitoring which indicates the presence of other contaminants in the finished water, EPA strongly encourages systems to report any results which may indicate a health concern. To determine if results may indicate a health concern, EPA recommends that systems find out if EPA has proposed an NPDWR or issued a health advisory for that contaminant by calling the Safe Drinking Water Hotline (800-426-4791). EPA considers detects above a proposed MCL or health advisory level to indicate possible health concerns. For such contaminants, EPA recommends that the report include: (a) the results of the monitoring; and (b) an explanation of the significance of the results noting the existence of a health advisory or a proposed regulation.

* If you are a groundwater system that receives notice from a state of a significant deficiency, you must inform your customers in your CCR report of any significant deficiencies that are not corrected by December 31 of the year covered by it. The CCR must include the following information:

- The nature of the significant deficiency and the date it was identified by the state.

- If the significant deficiency was not corrected by the end of the calendar year, include information regarding the State-approved plan and schedule for correction, including interim measures, progress to date, and any interim measures completed.

- If the significant deficiency was corrected by the end of the calendar year, include information regarding how the deficiency was corrected and the date it was corrected.

Annual Drinking Water Quality Report

MD0070021 TOWN OF RISING SUN

Annual Water Quality Report for the period of January 1 to December 31, 2020

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.

For more information regarding this report contact:

Name JUDY C MELTON

Phone 410 658 5353

TOWN OF RISING SUN is Purchased Surface Water

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.

A source water assessment has been performed by the Maryland Department of the Environment and is accessible on their website at:
https://link.edgepilot.com/s/366b151a/cJ_n6rrVOECRLQYriuzUJQ?u=https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx

Source Water Information

SWA = Source Water Assessment

Source Water Name	Type of Water	Report Status	Location
CC - PA1230004 PURCHASED, CHESTER	SW		See previous page

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	12/21/2019	1.3	1.3	0.15	0	ppm	Copper	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	12/21/2019	0	15	3	1	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 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)

Water Quality Test Results

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	2020	1.3	1.1 - 1.3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2020	36	1 - 52	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2020	48	25.4 - 69.5	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	08/10/2015	0.0198	0.0198 - 0.0198	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate [measured as Nitrogen]	12/14/2018	3.1	2.3 - 3.1	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	05/31/2017	5.2	5.2 - 5.2	0	50	pCi/L	N	Decay of natural and man-made deposits.
Combined Radium 226/228	05/31/2017	0.3	0.3 - 0.3	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	05/31/2017	6	6 - 6	0	15	pCi/L	N	Erosion of natural deposits.

For More Information

If you would like more information regarding the Chester Water Authority, please contact our Customer Service Department at 610.876.8181 or 1.800.793.2323, or visit our website at www.chesterwater.com.

Be sure to also visit and follow the Chester Water Authority on Facebook for news, updates, and more at www.facebook.com/ChesterWater/.

Chester Water Authority Board of Directors have regularly scheduled meetings on the third Thursday of every month at 2:00 pm at Concord Township Municipal Building, 43 Thornton Rd, Glen Mills, PA 19342. Due to the COVID-19 pandemic, CWA Board meetings are presently held telephonically until further notice. Information on participating in meetings and any changes to the schedule will be made publically available prior to the meeting on CWA's website and on Facebook.

About Chester Water Authority

CWA is a Pennsylvania Municipal Authority that was established in 1939 to provide potable water to our customers. We are a public water supplier, but we are not a for-profit organization. CWA serves the following areas:

Aston Township
Bethel Township
Birmingham Township
Brookhaven Borough
Chadds Ford Township
Chester Heights Township
Chester Township
City of Chester
Concord Township
East Marlborough Township
East Nottingham Township
Franklin Township
Kennelt Square Borough
Kennett Township
Londonderry Township
London Grove Township
Lower Chichester Township
Lower Oxford Township
Marcus Hook Borough
Middletown Township
Nether Providence Township
New Garden Township
New London Township
Oxford Borough
Parkside Borough
Penn Township
Pennsbury Township
Rising Sun (Maryland)
Thornbury Township (Chester County)
Thornbury Township (Delaware County)
Trainer Borough
Upland Borough
Upper Chichester Township
Upper Oxford Township
West Nottingham Township

Chester Water Authority
415 Welsh Street
Chester, PA 19013
610.876.8181
1.800.793.2323
www.chesterwater.com
www.facebook.com/ChesterWater/

Public Water Supplier Identification Number: PA1230004

Chester Water Authority 2020 WATER QUALITY REPORT

PWS ID# 1230004

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you or speak with someone who understands it.)

A Message from Our Executive Manager

On behalf of Chester Water Authority (CWA), I am pleased to share our 2020 Water Quality Report, which is also known as a Consumer Confidence Report (CCR). This report includes all water quality data based on testing performed between January 1, 2020 and December 31, 2020. As you review this report, you will notice that we continue to supply water that meets or exceeds all state and federal drinking water standards. This CCR was produced in accordance with regulations by the United States Environmental Protection Agency (US EPA) and the Pennsylvania Department of Environmental Protection (PA DEP), and contains information on the communities we serve, the water sources we use to produce your drinking water, the 2020 testing results, educational information on your drinking water, and our contact information.

Water is essential for public health, quality of life, fire protection, and economic development. CWA employees are committed to providing our customers with high quality drinking water. Please review this report to learn about the source of and the quality of your drinking water.

As always, CWA welcomes your questions about this report, your drinking water, and our organization. Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or by distributing copies by hand or by mail.

Please go to https://chesterwater.com/wp-content/uploads/2020/03/CCR2020.pdf for an electronic copy of our 2020 CCR. If you would like more information regarding this report, please contact our Customer Service Department at 610.876.8181 or 1.800.793.2323, or visit our website at: www.chesterwater.com.

At CWA, we take pride in our ability to provide our customers with high quality water and reliable service. We value our customers and are committed to keeping you informed about the quality of your water. CWA appreciates the opportunity to serve you.

Robert A. Judge
Executive Manager

Partnership for Safe Water

The Partnership is an unprecedented alliance of six prestigious drinking water organizations: American Water Works Association (AWWA), Association of Metropolitan Water Agencies (AMWA), Association of State Drinking Water Administrators (ASDA), National Association of Water Companies (NAWC), U.S. Environmental Protection Agency (USEPA), and Water Research Foundation (WRF). The Partnership's mission is to improve the quality of water delivered to customers by optimizing water system operations.

The Partnership for Safe Water celebrates award-winning utilities for their long-term commitment to optimize treatment plants and distribution systems to protect public health and deliver superior quality drinking water to their customers.

In 2020, the Octoraro Treatment Plant maintained the Excellence in Water Treatment Status in the voluntary Phase IV Partnership for Safe Drinking Water Program for the 7th consecutive year. The Phase IV status is the highest performance level that can be achieved and signifies fully optimized plant performance that produces water quality surpassing required federal standards.

Where Does Your Water Come From?

The water treated at the Octoraro Treatment Plant comes from two sources: the Octoraro Reservoir and the Susquehanna River. Both of these sources are in the Susquehanna River Basin. The water is treated and pumped to our customers from the CWA Octoraro Treatment Plant which produces an average of 31 million gallons per day.

The US EPA and PA DEP have established regulations that require public water systems to monitor for certain contaminants. They have also set limits for the amounts of contaminants that may be present in drinking water.

As your water supplier, we recognize that contaminants may be present in source waters and we operate the treatment processes of the Octoraro Treatment Plant to ensure the water we provide to our customers meets all drinking water standards.

(Octoraro Reservoir in Lancaster County, PA)

Source Water Protection Plan and Source Water Assessments

In 1988, a Source Water Assessment (SWA) of the Octoraro Reservoir was completed by the Cadmus Group. The SWA identified and ranked sources of potential threats of source water contamination. The SWA indicated that the Octoraro Reservoir was most susceptible to contamination by nutrients and sediments from agricultural activity. Other potential sources of contamination include spills from roads and bridges, residential and municipal wastewater treatment, urban storm water runoff and industrial discharges. To better protect the source water in the Octoraro Reservoir, CWA and PA DEP used the SWA as a foundation to develop a Source Water Protection Plan (SWPP) that was finalized in July 2015. The SWPP is a voluntary effort by interested parties or stakeholders to take action to prevent contaminants from entering CWA's Octoraro Reservoir.

The goal of the SWPP is to improve and protect the quality of the surface water within the Octoraro's 139 square mile watershed and within the Octoraro Reservoir. Improved water quality will benefit our customer's drinking water, as well as residents and businesses within the watershed. CWA hosts an annual steering committee meeting to continue protection efforts and to gain public participation and support. The steering committee is made up of residents, township officials, regulators, conservation districts, and other partnering stakeholders. The stakeholders include the Octoraro Watershed Association (OWA), the Alliance for the Chesapeake Bay, the Chester County Water Resources Authority, and the Lancaster County and Chester County Conservation Districts.

In addition to the Octoraro SWPP, the Susquehanna River Basin Commission (SRBC) completed a SWA for the Susquehanna River Conowingo Pond in 2003. The SWA indicated that Conowingo Pond was most susceptible to contamination from agricultural contaminants, spills from roads and bridges, and urban storm water runoff. Other potential sources of contamination include discharges from wastewater treatment plants, water treatment plants, and industries. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page:

http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4490

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 Southeast Regional Office at 484.250.5110 or by calling CWA at 1.800.217.7880.

Information about the Octoraro Watershed Association (OWA) may be obtained by contacting OWA directly at 517 Pine Grove Road, Nottingham, PA 19362, or by calling 1.717.529.2132.

Substances Expected in 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.

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, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater 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 stormwater 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, the US EPA and PA DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and PA DEP regulations establish limits for 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 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 US EPA's Safe Drinking Water Hotline at 1.800.426.4791.

Special Health Concerns

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. U.S. Environmental Protection Agency (EPA)/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1.800.426.4791.

Information About Lead

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.

CWA 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 two 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 go to US EPA's website at: www.epa.gov/safewater/lead.

Fluoride

CWA follows the PA DEP standard for fluoride in drinking water. PA DEP's standard is referred to as Maximum Contaminant Level (MCL). PA DEP set the MCL at 2 ppm for fluoride. CWA's treatment process is carefully controlled to achieve a targeted concentration level of 0.7 ppm in the water leaving our treatment plant.

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. In 2020, CWA monitored the Octoraro and Susquehanna source waters for Cryptosporidium. Cryptosporidium was detected in the Octoraro source in four of ten samples and in the Susquehanna in one of seven samples. Although our treatment process includes filtration to remove Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause Cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are a greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Nitrates

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

Other Water Quality Interest

How hard is your water? Hardness is a measure of the concentration of calcium and magnesium that are naturally present in water. High hardness levels cause soap not to foam as easily as it would at lower levels. Hardness levels range from 90 to 160 ppm, or 5 to 9 gpg. One grain per gallon is equal to 17.1 ppm of hardness.

What is the alkalinity in your water? Alkalinity is a measure of the water's ability to resist changes in the pH level and a good indicator of overall water quality. Alkalinity levels range from 34 to 69 ppm and averaged 52 ppm.

What is the pH (acidity) of your water? pH is a measure of acidity or alkalinity in water. A pH of 7.0 is considered neutral, neither acidic nor basic. The pH of the water averaged 7.9 pH units and ranged from 7.6 to 8.1 pH units.

Frequently Asked Questions

Why is my water discolored?

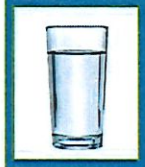
If your water is rusty, yellowish, or brownish, the color is likely a result of iron or rust. This may occur when there is an upset in the distribution system (such as a water main break) or when the direction of water flow changes (such as during hydrant use to extinguish a fire or during routine hydrant flushing). Discolored water may also result from internal plumbing issues. A rust problem is usually short-lived and we recommend that you do not wash clothes if you notice discolored water because the clothes may stain. Flush your cold and hot water taps, after the water clears, to make sure the rust does not accumulate or stay in your plumbing.

Why does my water appear milky?

When water is cold, such as during the winter, there is more air in it. When the cold water enters your home, the water warms up and air is released from the water. The air in the water will give it a milky or cloudy appearance. So, when you open the faucet to fill a glass, the air is released as bubbles similar to what you see when shaking a soda. As the water sits in the glass, it will clear from the bottom of the glass to the top. The air is not harmful. The more air in the water, the longer it will take for the water to clear and more cloudy or milky it looks.

Why is there pink slimy material in my toilet bowl, my pet's dish, my sink drain, bathtub, or shower head?

Bacteria grow well in these areas because they are moist and provide a food source for the bacteria to thrive on. The bacteria can be found in the air, in soil, in water, or on household surfaces. Orange and pink are common colors for many bacteria, but the bacteria known as *Serratia marcescens* is often the source of the "orangy/pink stuff". This bacteria is not easily eliminated from these areas. Periodic and routine cleaning of these areas followed by disinfection with a chlorine-based cleaner is the best way to control it.



What are these black particles in my water?

Black particles may arise from a broken household water filter that contains a carbon cartridge and the particles will look like coffee grounds. If you see particles you should replace the cartridge. Black particles may also be a result of a degrading faucet washer or gasket or a disintegrating black rubber liner inside a woven stainless steel flexible hose used in many plumbing connections. These particles are often described as small, like a spec of black pepper or oily; you should replace the washer, gasket, or hose. Choose a hose with a different style that does not contain a black rubber liner.

Why does my water smell like rotten eggs or sewage?

If you notice a smell similar to rotten eggs (sulfur) or sewage when running water, it might be caused by gases residing in the sink drain. In the drain, bacteria live on food, soap, hair, etc. When water goes down a drain, these gases are released into the air. These odors are often mistakenly associated with the water because they are observed only when the water is running. In this case, the odor is not in the water, it is merely the water pushing the gas out of the drain. You can confirm this by getting a glass of water from the faucet and carrying it away from the sink and drain. If the odor is coming from the drain, the odor will not be noticed in the glass of water once you move away from the sink drain. To resolve the drain odor, we recommend that you clean the drain.

2020 Water Quality Results

The following water quality tables show the quality of your drinking water compared to the standards set by the US EPA and the PA DEP in 2020. Although we test your water for more than 100 substances per year, only the substances that were detected in 2020 are shown in the table below. The US EPA and PA DEP allow us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

TURBIDITY - is a measure of the clarity or cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

	MCLG	MCL	Level Detected	Violation	Source of Substance
Turbidity (NTU)	NA	TT = 1 NTU for a single measurement	0.07	No	Soil Runoff
	NA	TT = at least 95% of monthly samples less than or equal to 0.3 NTU	100%	No	Soil Runoff

LEAD AND COPPER (2019)

	MCLG	AL	90th Percentile	Samples > AL	Violation	Source of Substance
Copper (ppm)	1.3	1.3	0.24	0	No	Corrosion of household plumbing
Lead (ppb)	0	15	10	3	No	Corrosion of household plumbing

INORGANIC CHEMICALS

	MCLG	MCL	Level Detected	Range of Detections	Violation	Source of Substance
Barium (ppm)	2	2	0.04	0.03 - 0.04	No	Erosions of natural deposits
Fluoride (ppm)	2	2	0.7	0.5 - 0.7	No	Water additive that promotes strong teeth
Nitrate (ppm)	10	10	9	2 - 9	No	Source water contaminant from fertilizer use

ENTRY POINT DISINFECTION RESIDUALS

	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Violation	Source of Substance
Chloramine (ppm)	0.20	0.6	0.6 - 3.2	No	Water additives to control microbes

DISTRIBUTION DISINFECTION RESIDUALS

	MRDLG	MRDL	Level Detected	Range of Detections	Violation	Source of Substance
Chloramine (ppm)	4	4	3.0	2.7 - 3.0	No	Water additives to control microbes

DISINFECTION BY-PRODUCTS

	MCLG	MCL	Level Detected	Range of Detections	Violation	Source of Substance
Total Trihalomethanes (ppb)	NA	80	60	21 - 67	No	By-product of drinking water chlorination
Haloacetic Acids (ppb)	NA	60	37	18 - 54	No	By-product of drinking water disinfection

TOTAL ORGANIC CARBON (TOC)

	MCLG	MCL	% Removal Required	% Removal Achieved	Number of Quarters Out of Compliance	Violation	Source of Substance
TOC (ppm)	NA	TT	25 - 45	40 - 59	0	No	Naturally present in the environment

SYNTHETIC ORGANIC CHEMICALS

	MRDLG	MRDL	Level Detected	Range of Detections	Violation	Source of Substance
Altrazine (ppb)	3	3	0.4	ND - 0.4	No	Runoff from herbicide used on row crops

Definitions of Terms Used in the Data Table

> : A symbol used to designate "greater than."

% : A symbol that means "percent."

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

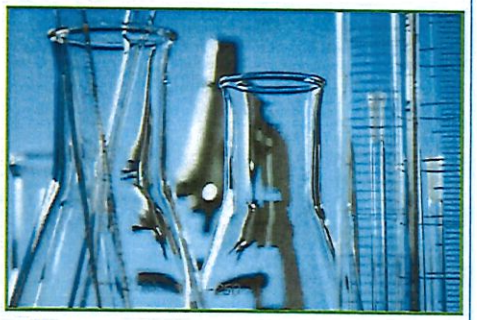
Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs (see below) as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (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.

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

Maximum Residual Disinfection 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 contaminant.

NA: Not applicable.



ND: Not detected.

Nephelometric Turbidity Unit (NTU): A measure of water clarity.

Parts per billion (ppb): One microgram per liter, or one in a billion.

Parts per million (ppm): One milligram per liter, or one in a million.

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