



2025

Annual Drinking Water Quality Report The Town of Rising Sun, Maryland

We're pleased to present this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services that we deliver to you every day. Our goal is to always provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. This report covers the period of January 1, 2024, through December 31, 2024.

As a general background, your water comes from the Chester Water Authority interconnect (CWA). The Annual Drinking Water Quality Report for CWA is attached to this report. For additional information about your water, you may contact Gary Gutierrez Water System Operator, 410-392-6637, or you may attend a public meeting of the Mayor and Commissioners. The meetings are held on the second Tuesday of each month at 5:30 PM at the Rising Sun Town Hall. A source water assessment is available upon request. A source water assessment has been performed by the Maryland Department of the Environment and is accessible on their website at:

https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx

The Town of Rising Sun conducts tests on our drinking water throughout the year as required by State and Federal regulations. Drinking water, including bottled water, may reasonably be expected to contain small amounts of contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Information about contaminants and potential health effects can be obtained by calling the EPA's **Safe Drinking Water Hotline (800-426-4791)**.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as people 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 sets guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants. These guidelines are available from the **Safe Drinking Water Hotline (800-426-4791)**.

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.

To ensure that tap water is safe to drink, EPA prescribes regulations which limit the amounts 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 people 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>.

Annual Drinking Water Quality Report

TOWN OF RISING SUN

Public Water System ID: MD0070021

We are pleased to present to you the Annual Water Quality Report (Consumer Confidence Report) for the year, for the period of January 1 to December 31, 2024. 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. (Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien).

For more information regarding this report, contact:

Name: Gary Gutierrez

Phone: 410-392-6637

Sources of Drinking Water

TOWN OF RISING SUN is Purchased surface water.

Our water source(s) and source water assessment information are listed below:

Source Name	Type of Water	Report Status	Location
CC - PA1230004 PURCHASED, CHESTER WATER	Surface water	Active	Nottingham, Pa

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 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 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, 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.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

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).

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. Chester Water Authority is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Chester Water Authority and Calvin Bonenberger Jr of the Town of Rising Sun, MD at (410)658-5353. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

An initial Service Line Inventory was submitted to the Maryland Department of the Environment on 1/26/2025. As a result, the Service Line Inventory requirement was fulfilled. The report is available upon request.

Source water assessment has been performed by the Maryland Department of the Environment and is accessible on their website at:

https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx

In the tables below, 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:

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

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.

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.

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 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.

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.

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.

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.

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

Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Avg: Average - Regulatory compliance with some MCLs are based on running annual average of monthly samples.

LRAA: Locational Running Annual Average

mrem: millirems per year (a measure of radiation absorbed by the body)

ppt: One part per trillion is equivalent to one nanogram (ng/L) per liter. A single drop of food coloring in 18 million gallons of water.

ppb: micrograms per liter (ug/L) or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter (mg/L) or parts per million - or one ounce in 7,350 gallons of water

picocuries per liter (pCi/L): picocuries per liter is a measure of the radioactivity in water.

na: not applicable.

Our water system tested a minimum of 2 sample(s) per month in accordance with the Total Coliform Rule for microbiological contaminants. With the microbiological samples collected, the water system collects disinfectant residuals to ensure control of microbial growth.

Disinfectant	Date	Highest RAA	Unit	Range	MRDL	MRDLG	Typical Source
CHLORINE	2024	2.3	ppm	-	4	4	Water additive used to control microbes

Regulated Contaminants

In the tables below, we have shown the regulated contaminants that were detected. Chemical Sampling of our drinking water may not be required on an annual basis; therefore, information provided in this table refers back to the latest year of chemical sampling results.

Lead and Copper	Period	90TH Percentile: 90% of your water utility levels were less than	Range of Sampled Results (low - high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2021 - 2022	0.066	<.02-1.1	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2021 - 2022	<2	<2.--<2	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts	Sample Point	Period	Highest LRAA	Range	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	HAAS @ FH-8	2023 - 2024	30	16 - 50	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	TTHM @ FH-60	2023 - 2024	33	16 - 60	ppb	60	0	By-product of drinking water disinfection
TTHM	HAAS @ FH-8	2023 - 2024	36	19.5 - 61.4	ppb	80	0	By-product of drinking water chlorination
TTHM	TTHM @ FH-60	2023 - 2024	37	19.9 - 62.4	ppb	80	0	By-product of drinking water chlorination

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
NITRATE	1/17/2023	4.38	4.38	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Unregulated Contaminant Monitoring Rule (UCMR)	Collection Date of HV	Highest Value (HV)	Range of Sampled Result(s)	Unit

WHAT IS PFAS?

PFAS - short for per- and polyfluoroalkyl substances - refers to a large group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been 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.

The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website: <https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx>.

The Environmental Protection Agency (EPA) finalized regulations for 6 PFAS compounds in drinking water in April 2024. The MCLs for PFOA and PFOS are each 4.0 parts per trillion (ppt). The MCLs for PFNA, PFHxS, and HFPO-DA (GenX chemicals) are each 10 ppt. Additionally, a mixture of two or more of the following chemicals (PFNA, PFHxS, HFPO-DA, and PFBS) will be regulated with a Hazard Index of 1 (unitless) to determine if the combined levels of these PFAS pose a risk and require action.

Violations

During the period covered by this report we had the below noted violations.

Violation Period	Analyte	Violation Type	Violation Explanation
10/16/2024 - 1/16/2025	LEAD AND COPPER RULE REVISIONS	LSL INVENTORY-INITIAL	We failed to complete and/or submit our initial service line inventory that was due to MDE by October 16, 2024.
10/16/2024 - 1/16/2025	LEAD AND COPPER RULE REVISIONS	LSL REPORTING-INITIAL	We failed to complete and/or submit our initial service line inventory that was due to MDE by October 16, 2024.

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Reseller Contaminants

Regulated Contaminants	Collection Date	Water System	Highest Sample Result	Range of Sampled Result(s) (low - high)	Unit	MCL	MCLG	Typical Source

Disinfection Byproducts	Monitoring Period	Water System	Highest LRAA	Range of Sampled Result(s) (low - high)	Unit	MCL	MCLG	Typical Source

There are no additional required health effects notices from Purchases.

Reseller Violations and Health Effects Information

There are no additional required health effects violation notices from Purchases.

Lead and Copper	Date Sampled	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Range of Tap Sampling

Copper	2021-2022	1.3	<.05	0	ppm	ND (<.05) - 4
Lead	2021-2022	15	<5	0	ppb	ND (<5) - 10

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.

A LEGACY OF ENVIRONMENTAL STEWARDSHIP

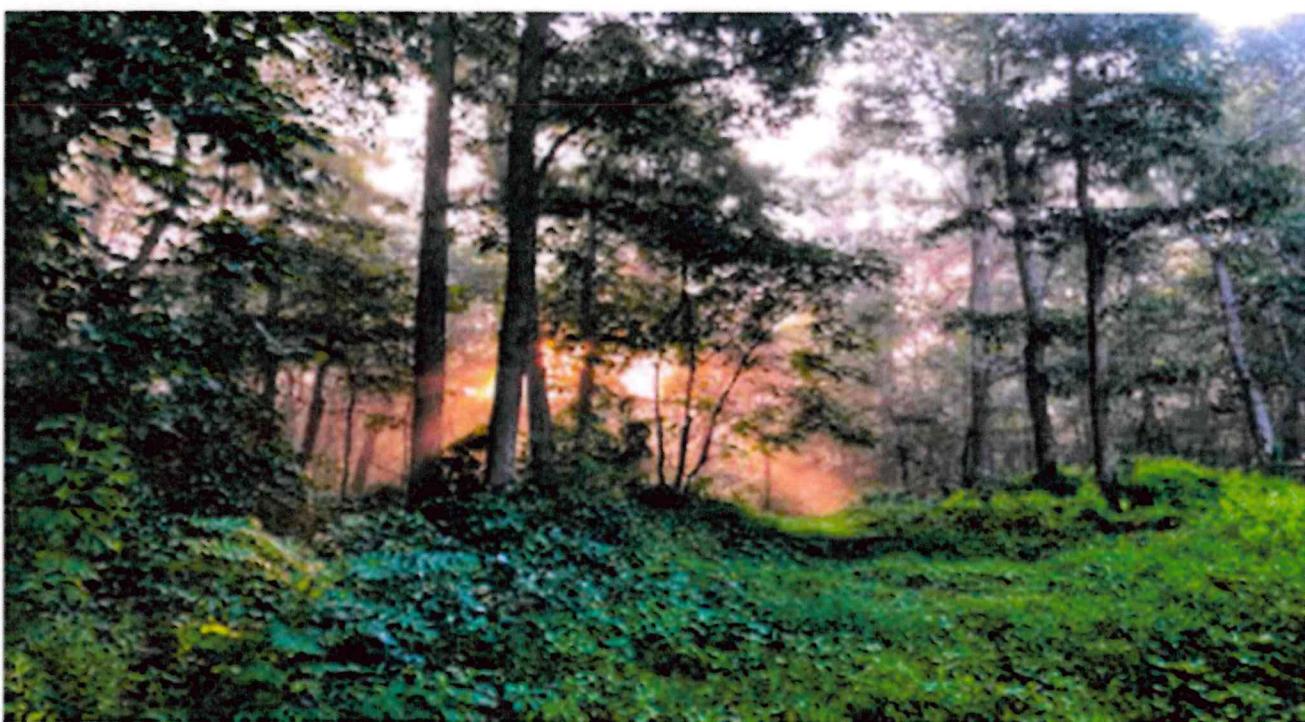
Since its inception, Chester Water Authority (CWA) has not only provided clean, safe, affordable water to its community, but also has embraced a deep commitment to environmental stewardship. From the early days when establishing the Octoraro Reservoir to recent initiatives, CWA has continuously demonstrated its dedication to being good neighbors.

CWA collaborated in 2024 with the Alliance for the Chesapeake Bay whose mission is to restore the lands and waters of the Chesapeake Bay watershed. This includes restoration work to keep waterways clean and sustain healthy lands.



This work fundamentally aligns with CWA environmental efforts. As part of this collaboration, CWA planted more than 3200 trees across 12 acres of its property. This ambitious project aimed to establish a riparian buffer—a strip of vegetation planted alongside streams or water bodies—to safeguard water quality and stream habitat. Through initiatives like tree planting, land conservation, and reservoir management, CWA continues to set the standard for environmental responsibility in the region. As the community looks towards the future, they can take pride in knowing that CWA remains dedicated to safeguarding their water and environment, ensuring a sustainable legacy for future generations.

For more information on volunteer opportunities and general event opportunities through Alliance for the Chesapeake Bay, please visit <https://www.allianceforthebay.org/get-involved/volunteer/> or <https://www.allianceforthebay.org/get-involved/events/>.



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 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=4513>

Complete reports were distributed to municipalities, water suppliers, 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 484.947.9390.



PARTNERSHIP FOR SAFE WATER



The Chester Water Authority (CWA) is committed to supplying its customers with high-quality water and ensuring public health protection that goes above and beyond existing federal and state regulations.

In keeping with that commitment, in 1995, the Authority joined the Partnership for Safe Water, a voluntary effort between some of the nation's leading drinking water organizations. The Partnership for Safe Water is an alliance of six prestigious drinking water organizations, including the American Water Works Association and the U.S. Environmental Protection Agency. This noteworthy achievement places CWA among an elite group, as only 19 treatment plants across the United States have successfully achieved this prestigious recognition.

The goal of the Partnership is to enhance public health protection by implementing preventive programs where legislation or regulation does not exist. These preventive measures focus on optimizing treatment plant performance and distribution system operation. The result is the production and delivery of superior-quality water to all users.

Chester Water Authority's Octoraro Water Treatment Plant has been consistently recognized by the Partnership for Safe Water program for its dedication to excellence. Since joining the Partnership in 2004, CWA has continually pursued improvements in water quality and operational performance.

Over the years, CWA has received multiple prestigious awards from the Partnership, including:

- The Phase III Director's Award in 2004
- The Phase IV President's Award and the Excellence in Water Treatment Award in 2013
- The 20-year Director's Award in 2024 for maintaining its commitment to improved water quality

The President's Award and Excellence in Water Treatment Award represent the highest levels of performance in the Partnership for Safe Water program. These accolades place CWA among the top one percent of surface water treatment plants in the United States—a testament to its elite status and dedication to public health protection.

SUBSTANCES EXPECTED IN DRINKING

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

Lead can cause serious health problems, especially for pregnant women and your children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Chester Water Authority is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Chester Water Authority at 1.800.793.2323. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://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 2023 CWA monitored the Octoraro and Susquehanna source waters for Cryptosporidium. Cryptosporidium was detected in the Octoraro source in none of six samples and in the Susquehanna in one of five 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.

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.

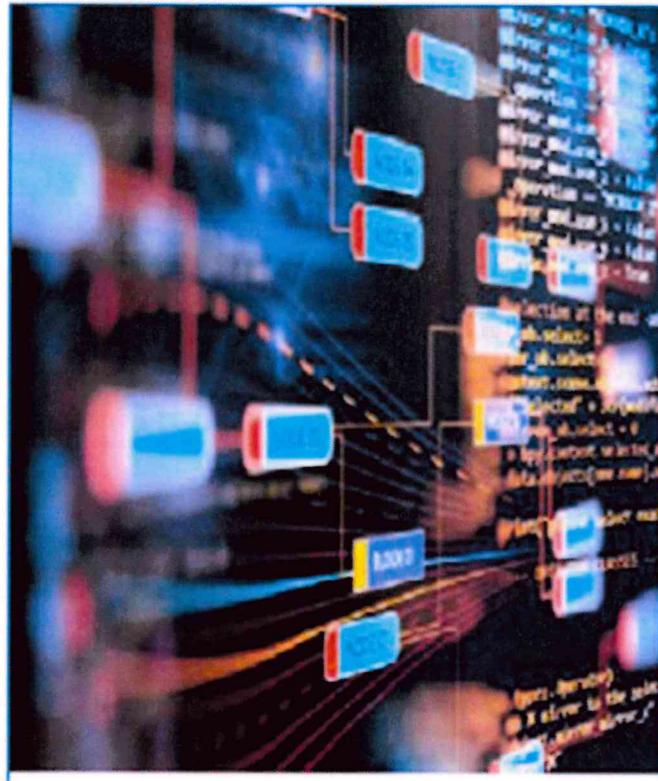
Nephelometric Turbidity Unit (NTU): A measure of water clarity.

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.

Parts per trillion (ppt): One nanogram per liter, or one in a trillion, which is equivalent to one drop in 20 Olympic sized swimming pools.

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



2024 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 2024. Although we test your water for more than 100 substances per year, only the substances that were detected in 2024 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. Some of our data, therefore, is more than one year.

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	0.04	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 (2022)							
	MCLG	AL	90th Percentile	Samples > AL	Range of Sample Results	Violation	Source of Substance
Copper (ppm)	1.3	1.3	0.24	0	ND-0.34	No	Corrosion of household plumbing
Lead (ppb)	0	15	14	5	ND-38	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	Erosion of natural deposits
Fluoride (ppm)	2	2	0.8	0.5-0.8	No	Water additive that promotes strong teeth
Nitrate (ppm)	10	10	8	2 - 8	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	1.1	1.1-3.5	No	Water additives to control microbes

DISTRIBUTION DISINFECTION RESIDUALS						
	MRDLG	MRDL	Level Detected	Range of Detections	Violation	Source of Substance
Chloramine (ppm)	4	4	2.9	2.4-2.9	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	45	22-60	No	By-product of drinking water chlorination
Haloacetic Acids (ppb)	NA	60	38	18-56	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 - 35	38-59	0	No	Naturally present in the environment

UNREGULATED CONTAMINANTS

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2024, Chester Water Authority participated in the fifth round of the Unregulated Contaminant Monitoring Rule (UCMR 5). For more information concerning Unregulated Contaminant Monitoring, visit these websites: <https://www.epa.gov/dwucmr> or <https://drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR>.

UNREGULATED CONTAMINANTS		
Contaminant (Units)	Average Levels Found	Range of Detections
Perfluorobutanesulfonic acid (PFBS) (ppt)	3.0	ND-4.5
Perfluorohexanoic acid (PFHxA) (ppt)	3.6	3.2-3.9
Perfluorooctanoic acid (PFOA) (ppt)	2.4	ND-5.1
Perfluoropentanoic acid (PFPeA) (ppt)	3.7	3.2-4.1

FREQUENTLY ASKED QUESTIONS

WHY IS MY WATER DISCOLORED?

If your water is rusty, yellowish, or brownish in color, it is likely due to the presence 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. If you experience this, simply run your cold and hot water for a couple of minutes to make sure the rust does not accumulate or stay in your plumbing.

WHY DOES MY WATER APPEAR CLOUDY?

Cloudy water, which is normal, occurs when air becomes trapped in the water. 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 giving 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 more air in the water, the longer it will take for the water to clear. It is important to understand that this cloudiness does not reduce the water's quality.

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; and is a sign you may want to consider replacing 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, and so on creating gases which are released into the air when water goes down the drain. 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.

OTHER WATER QUALITY INTEREST

What is the hardness of 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 ranged from 80 to 145 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 ranged from 39 to 77 ppm and averaged 56 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 7.7 to 8.1 pH units.

AWARDS FOR OUTSTANDING WATER TREATMENT

Best of Pennsylvania

2023 Best of Pennsylvania Taste Test Winner
2023 People's Choice Taste Test Competition
American Water Works Association

2024 Best of Pennsylvania Taste Test Winner
2024 People's Choice Taste Test Competition
American Water Works Association

Phase IV Excellence in Treatment

Partnership for Safe Water 2013

Phase III Directors Award

Partnership for Safe Water 2004

President's Award

Partnership for Safe Water 2012

5 Year Legacy President's Award

Partnership for Safe Water 2017

10 Year Legacy President's Award

Partnership for Safe Water 2022

5 Year Legacy Excellence Award

(For maintaining Phase IV status)

Partnership for Safe Water 2018

10 Year Legacy Excellence Award

(For maintaining Phase IV status)

Partnership for Safe Water 2023

20 Year Directors Award - Phase III

Partnership for Safe Water 2024



Lead and Your Health - Why is Lead a Problem?

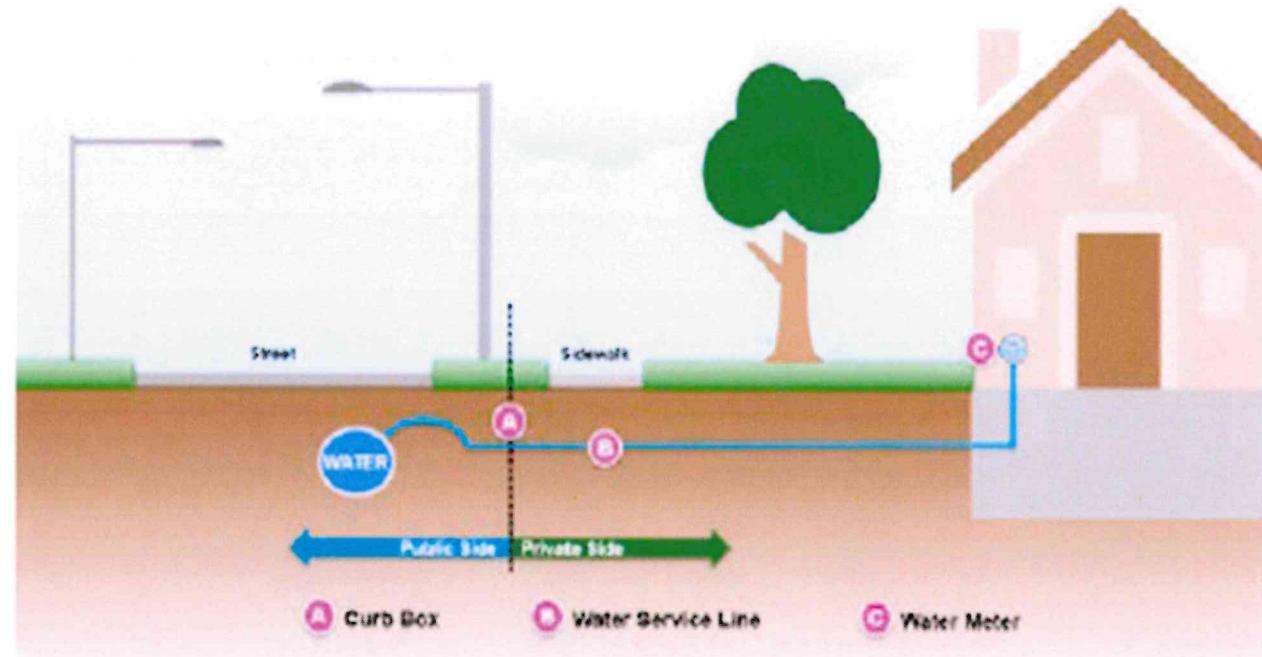
Lead can affect almost every organ and system in your body. Young children and infants are particularly vulnerable to lead. A dose of lead that would have little effect on an adult can have a significant effect on a child.

How does lead get into drinking water?

Lead can enter drinking water when pipes and plumbing fixtures that contain lead corrode, especially where the water has high acidity or low mineral content.

What is a service line?

The service line connects the water main to the property. The water utility owns the public side of the service line and the customer owns the private side of the service line.



Chester Water Authority prepared a service line inventory that includes the type of material contained in each service line in our distribution system. The inventory can be accessed online at <https://lead-service-line-inventory-1-cchesterwaterhub.arcgis.com/> or by contacting our office at servicelineinfo@chesterwater.com or 610-876-3335.



CWA
Chester Water Authority

Participate Now in the Water Service Line Survey

**Together, We Can Take Action
to Reduce Risk & Keep Our
Community Safe.**

Scan the QR code to take the
water service line material survey
or visit chesterwater.com/survey



Take the Water Service Line Survey Today!

Chester Water Authority is undertaking a water service line study in accordance with the EPA Lead and Copper Rule Revisions. Please note that CWA has NO LEAD WATER MAINS. However, some houses, especially older ones, may have lead service lines that run from the water main into the house. CWA wants to identify and map where those lead service lines exist in the system so that they can be addressed. As part of this study, we are looking to verify the material of water service lines in your area. You can help us by completing the survey to tell us about the material of your water service line.

Lead • dull, silver-grey color that easily scratches with a coin; a strong magnet ~~will~~ ^{can} cling to it.



Galvanized • dull, silver-grey color; a strong magnet ~~will~~ ^{can} cling to it.



Copper • the color of a copper penny.



Plastic • a white, rigid pipe joined to the water main piping by a stamp.



Questions? Need help?

Call: 610-876-3333

Email: servicelineinfo@chesterwater.com

Go to: chesterwater.com/survey
Have your CWA account number ready
& snap a pic of your water service line!
It's that easy!



Chester Water Authority
415 Webb St.
Chester, PA 19013

Chester Water Authority

Serving the City of Chester, Western Delaware County and Southern Chester County



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

Kennett 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
Thombury Township (Chester County)
Thombury Township (Delaware County)
Trainer Borough
Upland Borough
Upper Chichester Township
Upper Oxford Township
West Nottingham Township

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.chestenwater.com.

Chester Water Authority Board of Directors have regularly scheduled meetings on the third Thursday of every month at 2:00 pm in the first floor conference room located at its Distribution Headquarters at 437 W. Front Street, Chester, PA unless changed. Board agendas will be posted on the CWA website at www.chestenwater.com prior to the meetings. Information on any changes will be made publicly available prior to the meeting on CWA's website.



Chester Water Authority

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www.chestenwater.com
www.facebook.com/ChesterWater/

Public Water Supplier Identification Number: PA1230004