

# 2026 Annual Drinking Water Quality Report

City Of New Castle  
Municipal Services Commission  
216 Chestnut Street  
New Castle, Delaware 19720  
Public Water System ID # DE0000634  
June 1, 2025

The Municipal Services Commission (MSC) is charged with the responsibility of providing you reliable, high quality drinking water. Each spring MSC publishes this report in accordance with the requirements of the United States Environmental Protection Agency (US EPA) and Delaware Division of Public Health (DPH). This Consumer Confidence Report is designed to let you know where your water comes from, what it contains, and any risks water testing and treatment are designed to prevent.

The reporting period for this report is January 1, 2025 through December 31, 2025. The MSC wants you to know that we are committed to providing you with the most reliable, highest quality water supply available.

## Where Does Municipal Services Commission Water Come From?

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 radioactive materials, and can pick up substances resulting from the presence of animals or from human activity.

The source of the MSC's Water is the Potomac Aquifer which is a semi confined aquifer whose natural filtering characteristics helps to protect our customers from contaminants. The Division of Public Health in conjunction with the Department of Natural Resources and Environmental Control has conducted a Source Water assessment for the City of New Castle's community water system. Please contact Commission Water Utility Manager Jay Guyer at 302-221-4515 regarding how to obtain a copy of this assessment. You may also review the assessment on the website: <http://delawaresourcewater.org/assessments>.

## Where Do Contaminants Come From?

- A) Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- B) Inorganic contaminants, such as salts, and metals, which can be naturally -occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff and residential uses.
- D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- E) Radioactive contaminants, which can be naturally-occurring or can be the result of oil and gas production and mining activities.

## **Are There Limits to Contaminants?**

In order to ensure tap water is safe to drink, the US EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establishes limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may be reasonably 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 US EPA's Safe Drinking Water Hotline at 1-800-426-4791.

## **Lead In Drinking Water.**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Infants and children who drink water containing lead in excess of the Action Level (AL) could experience delays in their mental development. Children could show slight deficits in attention span and learning disabilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Lead in drinking water is primarily from materials and components associated with service lines and household plumbing. The Municipal Services Commission 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 in your pipes for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the 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 are available from the Safe Drinking Water Hotline at 1-800-426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

MSC prepared a service line inventory that includes the types of materials contained in each water service line in our distribution system from the main connection up to the meter or first valve in the structure. This inventory can be accessed online at <https://newcastlemsc.delaware.gov/msc-lead-service-line-inventory> or by contacting our office at 302-323-2333.

## **Are Some People at a Greater Risk from Contaminants?**

Some individuals may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 health care providers. US EPA/Center for Disease Control (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 at 1-800-426-4791.

## **MSC Water Sampling and Emerging Contaminants.**

Providing safe, high-quality drinking water is MSC's highest priority. To ensure our water continues to meet the highest standards, our staff continuously monitors and evaluates the treatment processes at the School Lane Water Treatment Facility. In addition to routine water quality sampling required by federal and state regulations, MSC proactively monitors for new and emerging contaminants to help protect our community's water supply.

One of the key components of MSC's treatment process is the Granular Activated Carbon (GAC) filtration system, which was installed in 2014 to remove per- and polyfluoroalkyl substances (PFAS). Staff routinely collect water samples from each filtration vessel to evaluate carbon performance and determine the optimal timing for carbon media replacement, ensuring the system continues to operate efficiently. As part of its proactive maintenance program, MSC completed replacement of 40,000 pounds of activated carbon in one filtration vessel during 2025. Routine monitoring, regular sampling, and timely carbon replacement reflects MSC's commitment to providing reliable, high-quality drinking water that meets or exceeds all applicable state and federal drinking water standards.

In May 2026, the U.S. Environmental Protection Agency (EPA) proposed revisions to the National Primary Drinking Water Regulations for PFAS. MSC will continue to monitor regulatory developments and implement any requirements established by the EPA and the Delaware Division of Public Health to ensure continued compliance and protection of public health.

## **What's The Bottom Line?**

Your drinking water meets or surpasses all Federal and State Drinking Water Standards. Staff at the Municipal Services Commission works hard to provide top quality water to every tap. We ask that all customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.

If you have any questions or concerns about this report or about your water utilities operations, please contact Water Utility Manager Jay Guyer by Phone at: 302-323-2333 or 302-221-4515 or by E-mail at: [guyerlj@newcastlemsc.delaware.gov](mailto:guyerlj@newcastlemsc.delaware.gov), or on the Website at [www.newcastlemsc.delaware.gov](http://www.newcastlemsc.delaware.gov).

## **Municipal Services Commission Water Quality Report.**

This report is based upon tests conducted by the Delaware Division of Public Health, Office of Drinking Water (ODW) and the MSC. Although many more contaminants were tested for only the contaminants listed below were detected in your water. The US EPA or ODW allows MSC to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. In the following tables, you may find terms and abbreviations that might not be familiar to you. To assist you with understanding these terms and abbreviations we have added definitions at the end of the report.

## Regulated Contaminants

Inorganic Contaminants	Unit of Measure	MCL	MCLG	Highest Level Detected	Annual Range	Date Sampled	Violation	Major Sources of Contaminants / Substances
Barium	ppm	2	2	0.164	0.164 - 0.164	2025	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride (1)	ppm	2	1.2	1.30	0.47 - 1.30	2025	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (as Nitrogen)	ppm	10	10	4.2	2.8 - 4.2	2025	No	Run off from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
Selenium	ppb	50	50	5.8	5.8 - 5.8	2025	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.

## Lead and Copper

Contaminant	Unit of Measure	MCLG	AL	90th Percentile	# of Sites Over AL	Date Sampled	Violation	Major Sources of Contaminants / Substances
Copper	ppm	1.3	1.3	0.174	0 out of 20	2025	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	ppb	0	15	0	0 out of 20	2025	No	Erosion of natural deposits; corrosion of household plumbing systems.

<b>Radiological Contaminants</b>	<b>Unit of Measure</b>	<b>MCL</b>	<b>MCLG</b>	<b>Highest Level Detected</b>	<b>Annual Range</b>	<b>Date Sampled</b>	<b>Violation</b>	<b>Major Sources of Contaminants / Substances</b>
Radium, Combined (226/228)	pCi/l	5	0	4.20	4.20 - 4.20	2025	No	Erosion of natural deposits.
Gross Alpha Particle (excluding radon and uranium)	pCi/l	15	0	2.62	2.62 - 2.62	2025	No	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.

**There are a number of ways to conserve water and they all start with YOU!**

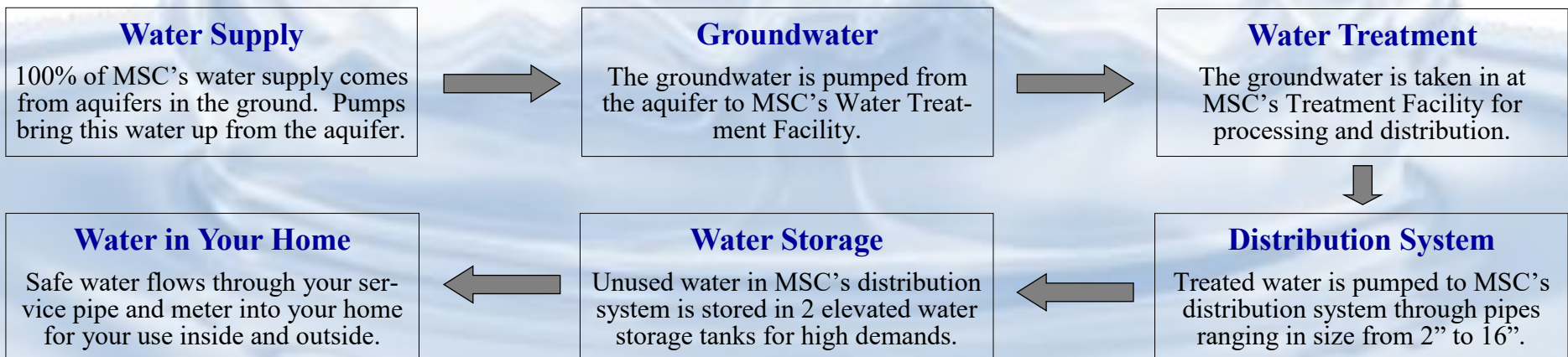
<b>Disinfection / Disinfection By - Products</b>	<b>Unit of Measure</b>	<b>MCL</b>	<b>MCLG</b>	<b>Highest Level Detected</b>	<b>Annual Range</b>	<b>Date Sampled</b>	<b>Violation</b>	<b>Major Sources of Contaminants / Substances</b>
Chlorine, Free (2)	ppm	4.00	4.00	1.60	1.06 - 1.60	2025	No	Disinfectant used in the drinking water industry.
Trihalomethanes, Total	ppb	80	0	14.43	14.43 - 14.43	2025	No	By - product of drinking water chlorination.
Total Haloacetic Acids (HAA5)	ppb	60	0	1.36	1.36 - 1.36	2025	No	By - product of drinking water chlorination.

## Unregulated Contaminants

Contaminants	Unit of	MCL	MCLG	Highest Level	Annual	Date
Alkalinity	ppm	N / R	N / R	21.4	21.4 - 21.4	2025
Chloride	ppm	N / R	250.0	112.3	56.5 - 112.3	2025
pH, Field (3)	0 - 14 scale	N / R	6.5 - 8.5	9.8	6.0 - 9.8	2025
Sodium	ppm	N / R	50	42.9	42.9 - 42.9	2025
Sulfate	ppm	N / R	250	15.8	7.3 - 15.8	2025
Temperature	Degree - C	N / R	N / R	18	12 - 18	2025
PFBA *	ppt	N / R	N / R	130	ND - 130	2025
PFHxS *	ppt	N / R	N / R	1.2	ND - 1.2	2025
PFOS *	ppt	N / R	N / R	1.3	ND - 1.3	2025

\* Currently there are no MCLs for PFAS contaminants. EPA has issued a Health Advisory Level of 70 parts per trillion (ppt) that were calculated to offer a margin of protection against adverse health effects. On April 10, 2024 EPA announced Maximum Contaminant Levels (MCLs) of 4 ppt for PFOA and 4 ppt for PFOS, and a Group Hazard Index for four additional PFAS compounds. This MCL will go into effect starting in 2029.

## Water's Journey to Your Home



## Sharing the Report

MSC requests landlords, apartment managers, businesses, and schools share this information with others who might not have received it directly. Consider posting it in a public area or advise others that the report is available on line at: <http://newcastlemsc.delaware.gov/> or by contacting the Commission.

Customers residing in Boothhurst Subdivision and along Edgewood Drive should review the Artesian Water Company Consumer Confidence Report, as MSC purchases your water from Artesian and resells it to your service areas. Artesian's Water Quality Report is available on line at: <https://www.artesianwater.com/wp-content/uploads/wqawc2025.pdf>

## Municipal Services Commission Water System Facts

Metered Customers: 2,461 Water Customers

Annual Water Supply: 159,165,950 Gallons

Miles of Water Mains: 30 Miles

2025 Average Daily Water Demand:  
436,071 Gallons per Day

2025 Peak Day Water Demand:  
1,154,849 Gallons

Active Supply Wells: 4 Wells - 3 located on the Penn Farm and 1 on Basin Road

Treatment Facilities: 1 Facility with a 1.6MGD capacity

Storage Capacity: 2 Elevated Water Tanks with a capacity of 1.6 Million Gallons or approximately 2 days supply.

Public Fire Hydrants: 186 - Flushed, inspected, and maintained annually.

For Reliability MSC maintains 2 emergency interconnections with Artesian Water Company at different locations in our distribution system to ensure adequate supply and system pressure are always available should the need arise.

### Waters True Value

MSC provides our customers with a reliable, high quality water supply that is priced much less than other utility services.

An average MSC residential water customer pays \$0.0173 per gallon or \$2.31 per day or \$69.26 per month for water service.

(Estimate is based upon 2 individuals in a residential dwelling using 4,000 gallons per month or 133 gallons per day at MSC's current rates)

### Microbiological Contaminants - Total Coliform Bacteria

120 Samples,  
10 Per month, were  
collected during 2025  
120 samples collected  
were absent of  
Coliform Bacteria.

Number of  
Violations: None

Major Sources:  
Naturally present in  
the environment.

### Annual Average Readings

- 1) Average Fluoride Reading - 0.85ppm
- 2) Average Chlorine Reading - 1.34ppm
- 3) Average pH Reading - 7.1 on the 0 - 14 Scale

Note: Averages are based upon the daily water quality readings taken at the Commission's School Lane Water Treatment Facility.

# Definitions:

**90th Percentile** - The ninth highest reading (of 10 samples), which is used to determine compliance with the Lead and Copper Rule.

**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. ALG's allow for a margin safety.

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible.

**Maximum Contaminant Level Goal (MCLG)** - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**Maximum Residual Disinfectant Goal (MRDLG)** - The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

**Not Applicable (N / A)** - Field is not applicable to the substance.

**Non - Detect (ND)** - Laboratory analysis indicates that the constituent is not present.

**Not Regulated (N / R)** - No MCL is identified because these substances are unregulated.

**Parts Per Million (ppm)** - 1 Part Per Million corresponds to 1 minute in 2 years or a single penny in \$10,000.00.

**Parts Per Billion (ppb)** - 1 Part Per Billion corresponds to 1 minute in 2000 years or a single penny in \$10,000,000.00.

**Parts Per Trillion (ppt)** - 1 Part Per Trillion corresponds to 1 minute in 2,000,000 years or a single penny in \$10,000,000,000.00.

**Picocuries Per Liter (pCi/l)** - A measure of the radioactivity in water.