MSC

Municipal Services Commission of the City of New Castle

Spring / Summer 2024 Newsletter

School Lane Carbon

Filtration System

Secretary's Message

I hope this message finds you well and enjoying the start to summer.

Electric Supply costs continue to increase due to state and federal regulations. The shutdown of coal burning generation facilities and the slow implementation of green generation technologies increases costs to our customers which is unfortunate. Fortunately, as DEMEC members we are joint owners of the Warren F. Beasley Power Plant in Smyrna, DE. The Beasley Plant has benefited from the higher auction prices which has helped offset some of these increases. MSC is better positioned than many other electric providers and continues to offer the lowest residential electric rate in the state.

The cost of water production also continues to increase due to changes in regulations governing drinking water. As early implementors of carbon filtration for PFAS removal, MSC is well positioned to stay ahead of these changes in regulations. Having a long-term pilot study project running in parallel with our current filtration system has allowed us to gain a better understanding of our water makeup and be prepared to make more informed decisions on filter media options. MSC plans to install an Ion Exchange (IX) media in one (1) of our existing filtration vessels which is expected to perform better and have a much longer lifespan than our current media. This will reduce operational costs saving our customers money and allows MSC to continue providing high quality water that meets and exceeds federal and state regulations.

MSC understands that operational cost increases are born by our customers through rate adjustments. We continue planning for the long-term making our best effort to limit the effect to our customers.

This edition of the Newsletter contains the annual Water Department 2024 Consumer Confidence Report (CCR). In June of each year, MSC publishes this report as required by the United States Environmental Protection Agency (EPA) and the Delaware Division of Public Health, Office of Drinking Water. The report communicates to our customers the water quality and the results from testing performed on their drinking water. MSC is proud to report the water provided complies with all federal and state drinking water standards. The Water Department strives to provide the best service and highest water quality possible.

Thank you,

Scott Blomquist

General Manager / Secretary

John Wik
Commissioner
Appointed by City Council
Term: November 2023 to March 31, 2027

Valarie Leary,
Commissioner/ Mayor
Appointed by MSC Charter
Term: August 2023 to March 31, 2027

David Atherton
Commission President
Appointed by City Council
Term: September 2023 to March 31, 2026

CALENDAR OF EVENTS

July 4th & 5th - Independence Day

September 2nd - Labor Day

November 5th - Election Day

November 28th - Thanksgiving Day

November 29th - Day After Thanksgiving

December 24th - Christmas Eve

December 25th - Christmas Day

January 1st - New Years Day

Delmarva 811
POWERED BY MISS UTILITY

Planning a project at home which involves digging on your property?

Call MISS UTILITY
811 or
1-800-282-8555 in DE

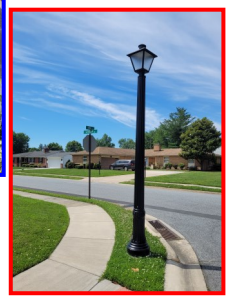
After Hours Electric or Water Emergency
Call 323-2330 or 323-2333

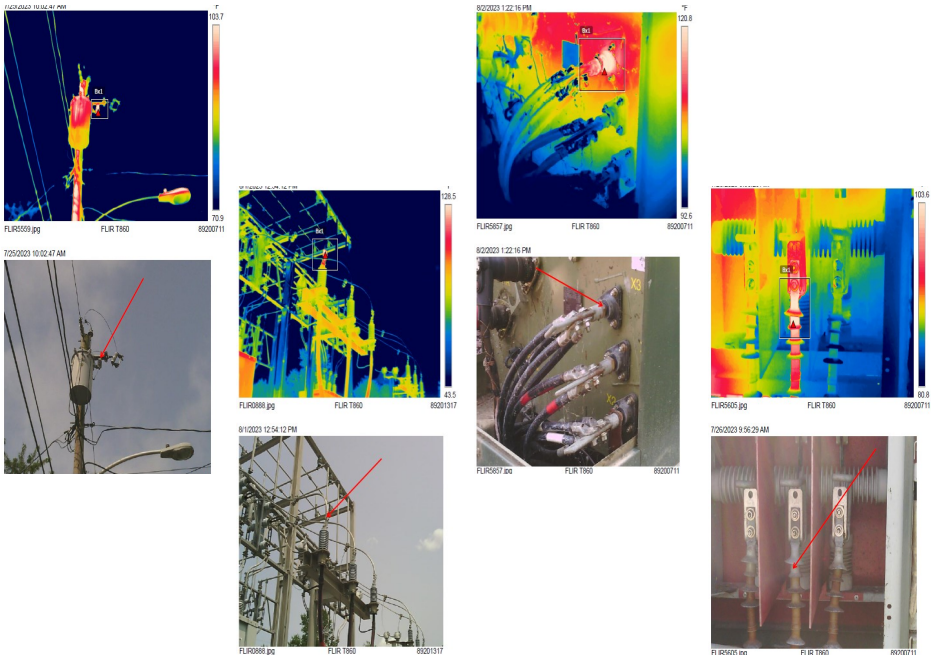
RESOURCES at Your Fingertips

City Administration Office	322-9801
Mayor's Office	322-9802
Public Works Department	322-9813
MSC Main Office	323-2330
MSC Utility Building	323-2333
Scott Blomquist Secretary / General Manager	221-4513
Ken Natale Comptroller/Treasurer	221-4517
Art Granger Electric Utility Manager	221-4520
Jay Guyer Water Utility Manager	221-4515

Van Dyke Village
Underground Electric Conversion

Spring is here and MSC began the final phase of the Van Dyke Village aerial to underground electric conversion project. The Electric Department started in the middle of April and plans to be completed by December. There are 3 transformers that feed approximately 30 homes and 10 street lights to install for this project phase. One of the largest projects completed by MSC, with the exception of a conduit bore under Moores Lane that was performed by a contractor, it was completed by MSC Linemen and Water Operators. MSC appreciates your continued patience and understanding while our crews work diligently reducing maintenance costs and improving reliability of the City's Electric System.





Electric Department Maintaining Safe and Reliable Electric Service

The MSC Electric Department's goal is to maintain safe and reliable electric service to our customers. Distribution system maintenance this year included routine tree trimming around our electric wires in neighborhoods, replacing several old utility poles in Washington Park and on West 5th Street, cleaning and making repairs to all of the post lights throughout town, and correcting issues found during our yearly electric system thermal imaging survey. Thermal imaging is a preventative maintenance technology that helps identify potential problems in electric circuits and equipment, such as overheating cables, and loose, worn, and/or corroded connections.

LED Street Light Project

Have you noticed the new LED street lights MSC installed on our utility poles along Wilmington Road from Moores Lane to Arbutus Avenue? The Delaware Department of Transportation purchased 23 new light fixtures and worked with MSC to have our Electric Linemen perform the installation. The new fixtures increase safety by providing improved lighting while reducing energy consumption.

Maintenance Improving Reliability

MSC will begin installing new circuit relays at Dobbinsville Substation and improving substation instrumentation. The first phase of installing an additional main electric circuit from Center Point Park to Dobbinsville Substation will begin this Summer. It will include conduit, wire, and manholes along a Right of Way in Riverbend Subdivision and be fully funded by the developer. If you have any questions or concerns regarding projects the Electric Department is working on, please contact MSC's main office at 302-323-2330 for additional information.

U.S. Environmental Protection Agency (EPA)

Issues New Standards for PFAS in Drinking Water

MSC would like to take this opportunity to assure you of our proactive approach to water quality treatment as you may have read or heard that the U.S. Environmental Protection Agency (EPA) issued new standards for PFAS levels in drinking water. MSC is committed to delivering the most reliable, highest quality drinking water to our customers that meets or exceeds all state and federal regulations. As a clear priority, MSC has not only closely monitored the unfolding concerns related to PFAS, but pro-actively tested our sources of supply and installed treatment for the removal of PFAS based upon health advisory levels set by the EPA prior to their now setting a more stringent maximum contaminant level in drinking water to be effective in 2029.

PFAS are a group of manufactured chemicals used since the 1940s to produce common household and commercial products. Some products that may contain PFAS include non-stick cookware, fast food wrappers, popcorn bags, pizza boxes, stain repellents and fire fighting foams. PFAS persist in the environment, thus sometimes characterized as "forever chemicals" and over time find their way into sources of drinking water.

MSC's commitment to ensuring drinking water quality led us to install water treatment in 2014 addressing PFAS in our source water. Over the past 4 years, MSC has partnered with Calgon Carbon pilot testing different carbon and resin filter material. The Pilot Study has shown that a combination of granular activated carbon (GAC) and ion exchange (IX) resin filtration system will be the best approach to removing the maximum amount of PFAS compounds for the longest length of time. MSC has secured a State Revolving Fund Loan for $1.1 Million for upgrading the PFAS Treatment. This Loan will have principal forgiveness for the full amount when the project is completed. Treatment upgrades are expected to be completed this year, ensuring we are well prepared to meet the EPA's new drinking water standard.

Of course, installation of new treatment systems comes at a cost, both initially for the system and then for its on-going operation and maintenance. To lessen the burden of that cost on our customers, MSC has joined fellow water utilities in efforts to ensure that PFAS manufacturers, the parties ultimately responsible for the introduction of PFAS into water supplies across the country, bear financial responsibility for treatment of the affected water supplies.

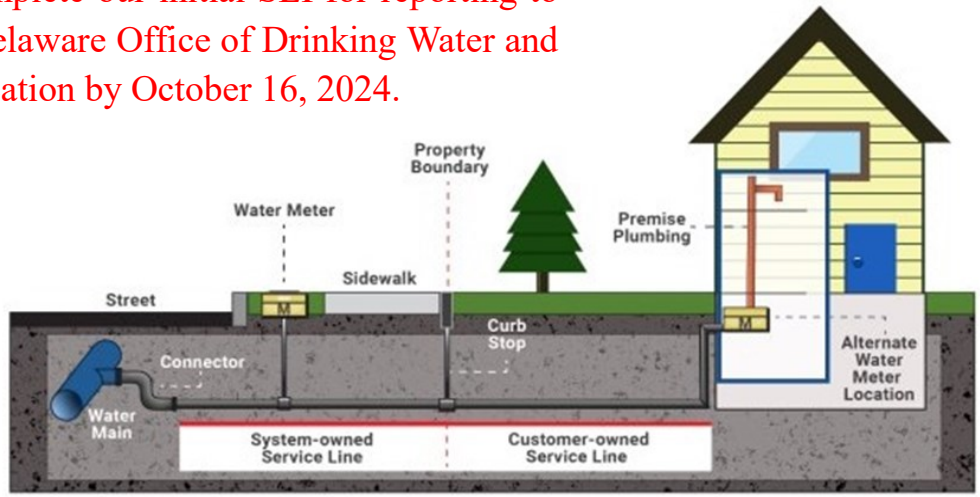
We appreciate this opportunity to inform you of our efforts on this important matter and wish to assure you that the MSC will continue taking a proactive approach to ensure we deliver the most reliable, highest quality water to our customers.

U.S. EPA Lead and Copper Rule Revisions - Lead Service Line Inventory

The 1991 Lead and Copper Rule (LCR) is US EPA's National Primary Drinking Water Regulation requiring actions by public water systems to reduce lead and copper levels in drinking water. On January 15, 2021, EPA implemented the Lead and Copper Rule Revisions (LCRR) and published the proposed Lead and Copper Rule Improvements (LCRI) to further reduce lead exposure through drinking water. Water Systems must comply with the requirements starting on October 16, 2024.

One element of the LCRI requires water systems to develop a water service line inventory (SLI) for both utility and customer owned portions of the water service line. MSC began working on its' inventory in early 2023 developing a methodology to follow for collecting data and entered into an agreement with 120 Water, Inc. to assist in managing and organizing the data for publication. MSC's methodology follows the US EPA's guideline for developing a water service line inventory. MSC's goal is to identify the service line materials for our 2,300 water services that supply water from the main up to two (2) feet inside the home or structure and notify our customers of a potential issue.

The process of identifying service line materials includes, water meter install data, review of historic water system records, review of technical specifications/ standards for water system construction, city and county records, visual water system inspections, information obtained through normal system operation, and predictive modeling. MSC is on schedule to complete our initial SLI for reporting to the Delaware Office of Drinking Water and publication by October 16, 2024.



2024 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, 2023

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, 2023 through December 31, 2023. 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.

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.

Does MSC Do Only The Minimum Testing Required by Law?

The MSC has tested or has had its water tested by other agencies to look for contaminants which may not be regulated substances. The Commission had DNREC test for contaminants which may have leaked from landfills that are in close proximity to its wells. The EPA and State of Delaware have not set standards for monitoring Radon at this time, none the less the Commission has tested for Radon in its source water and found minimal traces.

MSC Staff continuously evaluates performance of the Granular Activated Carbon filtration system at our School Lane Treatment Facility which removes per- and polyfluoroalkyl (PFAS) substances. Monthly MSC collects water samples from the vessels to monitor carbon performance and to determine when a carbon media exchange should be scheduled. Every 6 months, MSC collects several finished water samples from representative locations in our distribution system testing for the presence of 18 PFAS compounds. There were Non-Detect results on all of the PFAS compounds in 2023 Annually, MSC collects samples from our water supply to monitor the levels of PFAS. MSC completed a 40,000lb carbon media exchange in one of the filtration vessels during 2023. Continuous sampling and carbon media exchange represents MSC's ongoing commitment to delivering the most reliable, highest quality drinking water to our customers that meets or exceeds all state and federal regulations.

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: 302-221-4515, by Fax at: 302-324-1842, or E-mail at: guyerlj@newcastlemsc.delaware.gov, or on the Web at 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
Arsenic	ppb	10	0	0.8	0.8 - 0.8	2017	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	ppm	2	2	0.1057	0.1057 - 0.1057	2017	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride (1)	ppm	2	1.2	1.17	0.37 - 1.17	2023	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nickel	ppb	100	100	7.1	7.1 -7.1	2017	No	Occurs naturally in soils, ground waters, and surface waters.
Nitrate (as Nitrogen)	ppm	10	10	3.6	0.5 - 3.6	2023	No	Run off from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
Selenium	ppb	50	50	4.7	4.7 - 4.7	2017	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	0.116	0 out of 20	2022	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	ppb	0	15	1	0 out of 20	2022	No	Erosion of natural deposits; corrosion of household plumbing systems.

Radiological Contaminants	Unit of Measure	MCL	MCLG	Highest Level Detected	Annual Range	Date Sampled	Violation	Major Sources of Contaminants / Substances
Radium, Combined (226/228)	pCi/l	5	0	1.88	1.88 - 1.88	2023	No	Erosion of natural deposits.
Gross Alpha Particle (excluding radon and uranium)	pCi/l	15	0	2.08	2.08 - 2.08	2023	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!

Disinfection / Disinfection By - Products	Unit of Measure	MCL	MCLG	Highest Level Detected	Annual Range	Date Sampled	Violation	Major Sources of Contaminants / Substances
Chlorine, Free (2)	ppm	4.00	4.00	1.81	1.13 - 1.81	2023	No	Disinfectant used in the drinking water industry.
Trihalomethanes, Total	ppb	80	0	2.32	2.32 - 2.32	2022	No	By - product of drinking water chlorination.
Total Haloacetic Acids (HAA5)	ppb	60	0	ND	0.0 - 0.0	2022	No	By - product of drinking water chlorination.

Unregulated Contaminants

Contaminants	Unit of Measure	MCL	MCLG	Highest Level Detected	Annual Range	Date Sampled
Alkalinity	ppm	N / R	N / R	28.6	28.6 - 28.6	2023
Chloride	ppm	N / R	250.0	101.4	42.6 - 101.4	2023
Manganese	ppm	N / R	0.05	0.0021	0.0021 - 0.0021	2017
pH, Field (3)	0 - 14 scale	N / R	6.5 - 8.5	9.2	6.1 - 9.2	2023
Sodium	ppm	N / R	50	48.6	48.6 - 48.6	2023
Sulfate	ppm	N / R	250	15.9	4.8 - 15.9	2023
Temperature	Degree - C	N / R	N / R	18	12 - 18	2023
Zinc	ppm	N / R	5	0.0278	0.0278 - 0.0278	2017

Water's Journey to Your Home

Water Supply

100% of MSC's water supply comes from aquifers in the ground. Pumps bring this water up from the aquifer.

Groundwater

The groundwater is pumped from the aquifer to MSC's Water Treatment Facility.

Water Treatment

The groundwater is taken in at MSC's Treatment Facility for processing and distribution.

Distribution System

Treated water is pumped to MSC's distribution system through pipes ranging in size from 2" to 16".

Water Storage

Unused water in MSC's distribution system is stored in 2 elevated water storage tanks for high demands.

Water in Your Home

Safe water flows through your service pipe and meter into your home for your use inside and outside.

Microbiological Contaminants -Total Coliform Bacteria

120 Samples, 10 Per month, were collected during 2023

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 - 0.85 ppm

2) Average Chlorine Reading - 1.46 ppm

3) Average pH Reading - 7.3 on the 0 - 14 Scale

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

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.

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 $0.0161 per gallon or $2.15 per day or $64.51 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)

Municipal Services Commission Water System Facts

Metered Customers: 2,337 Water Customers

Annual Water Supply: 156,350,632 Gallons

Miles of Water Mains: 30 Miles

2023 Average Daily Water Demand: 428,358 Gallons per Day

2023 Peak Day Water Demand: 814,714 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.

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.

Municipal Services Commission
of the City of New Castle

216 Chestnut Street
New Castle, Delaware 19720
302-323-2330

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