Middletown Water Department

19 W. Green Street
Middletown, DE 19709
PWS ID#: DE0000614
Report Created: June 2021

2020 Water Quality Report

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with this information because informed customers are our best allies.

Spanish (Espanol): Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

Do I need to take special precautions?
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/Centers 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 Water Drinking Hotline (800-426-4791).

Where does my water come from?
The water serving your home comes from the Upper Potomac and Magothy aquifers via four (4) wells ranging in depth from 374 feet to 838 feet. These aquifers are confined and protected from the influence of past farming activities and saltwater intrusion.

Source water assessment and availability
Our source water assessment is available through: http://delawaresourcewater.org/assessments/ or contacting the Town of Middletown water department at 302-378-5142

The Source Water Assessment's Summary of Our System's Susceptibility to Contamination: Middletown Water Department has a low susceptibility to pathogens and pesticides, a moderate susceptibility to petroleum hydrocarbons, and very high susceptibility for metals.

Why are there contaminants in my drinking water?
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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline, 800-426-4791.

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. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems.

How can I get involved?
Contact the Middletown Water Department at 302-378-5142. The Town of Middletown holds monthly meetings at the Town Hall on the first Monday of every month, located at 19 W. Green Street. Visit www.middletown.delaware.gov for more information.

Additional 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. Middletown Water Department 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 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

Violations: During the past year, we were required to conduct one (1) Level 1 assessment. One (1) Level 1 assessment was completed. In addition, we were required to take one (1) corrective action and we completed one (1) action. *The corrective action was to use preferred testing sites.*

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

Assessment definitions: 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

For more information, contact:
Middletown Water Department
431 Haveg Road
Middletown, DE 19709
302-378-2211

Unregulated Contaminates UCMR4

contaminates	units	range	average	Date sampled
Bromochloroacetic acid	ppb	0.425 – 0.575	0.5	2019
Bromodichloroacetic acid	ppb	0 – 0.547	0.547	2019
Dichloroacetic acid	ppb	0.37 – 8.31	2.42	2019
Trichloroacetic acid	ppb	0.859 – 1.85	1.47	2019
Manganese	ppb	1.01 - 2.77	1.14	2019

Delaware Secondary Drinking Water Standards

Contaminants	State SMCL	Average	Range
Alkalinity	n/a	96.6	84.2 -109
Chloride	250 ppm	4.57	3.68 – 5.16
Iron	300 ppb	105	0- 290
Manganese	50 ppb	0.0006	0 -0.0006
pH	6.5 – 8.5	7.14	6.8 -7.6
Sodium	n/a	37.82	34.7 -40.9
Sulfate	250 ppm	8.55	7.4 -9.9

Table of Regulated Contaminants

Lead and Copper	Units	MCLG	AL	90th Percentile	# sites over AL	Sample Date	Violation	Typical Source of Contamination
Lead	ppb	n/a	15	0.533	0	2018	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper	ppm	n/a	1.3	0.219	0	2018	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing system.

Regulated Contaminants	Units	MCLG	MCL	Highest Level	Range	Sample Date	Violation	Typical Source of Contamination
Haloacetic acids (HAA5)	ppb	n/a	60	2	0 -5.508	2020	NO	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	ppb	n/a	80	8	2.61 - 53.35	2020	NO	By-product of drinking water disinfection
Chlorine	ppm	MRDLG 4	MRDL 4	1.12	0.76 -1.25	2020	NO	Water additive to control microbes.
Fluoride	ppm	2	2	0.9	0.1916-0.9173	2020	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
MTBE	ppb	10.0	10.0	0	0-0	2016	NO	Leaking, underground, petroleum storage tanks
Nickel	ppb	100	100	0	0-0	2016	NO	Erosion of natural deposits; corrosion of household plumbing systems

Coliform Bacteria						
MCLG	Total coliform MCL	Highest NO. of positive	Fecal coliform or E.coli MCL	Total No. of positive E.coli or Fecal coliform samples	violation	Likely source of contamination
0	1 positive monthly sample	2		0	NO	Naturally present in the environment

Definitions

Unit Descriptions	
Term	**Definition**
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	**Definition**
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
SMCL	SMCL: Suggested Maximum Contaminant Level for aesthetic contaminants.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.