2023 Water Quality Report
Magnolia Water Department
3 East Walnut Street, Magnolia, DE 19962
PWS ID# DE0000610
April 20, 2023

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?
Your water is groundwater that comes from the confined Frederica aquifer.

Source water assessment and availability
Our source water assessment is available through: http://delawaresourcewater.org/assessments/

The Source Water Assessment's Summary of Our System's Susceptibility to Contamination
Overall, Magnolia Water Department has exceeded drinking water standards for metals based on analytical data for iron. It has a medium susceptibility to nutrients and a low susceptibility to pathogens, petroleum hydrocarbons, pesticides, PCBs, other inorganic compounds, and other organic compounds based on land use.

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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 byproducts 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.

How can I get involved?
If you have any questions about this report or concerning your water utility, please call (302) 853-5203. We Want our valued customers to be informed about their water utility.

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. Magnolia 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

For more information, contact:
Dustan Russum
Town of Magnolia
P.O. Box 240
Frederica, DE 19946
(302) 853-5203

Water Quality Data Tables

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions in the tables below.

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.

Table of Regulated Contaminants Utilizing 2022 Test Results

Lead and Copper	Units	MCLG	AL	90th Percentile	# sites over AL	Sample Date	Violation	Typical Source of Contamination
Copper	ppm	n/a	1.3	0.036	0	2020	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	6	6	2022	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	ppb	n/a	80	6	6	2022	No	By-product of drinking water disinfection
Chlorine	ppm	MRDLG 4	MRDL 4	1.54	0.38-1.54	2022	No	Water additive to control microbes.
Fluoride	ppm	2	2	0.5	0.1-0.5	2022	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Delaware Secondary Drinking Water Standards

Contaminants	Units	State SMCL	Average	Range
Alkalinity	ppm	n/a	88	87-88
Chloride	ppm	250	10	7-16
Iron	ppb	300	1	1
Manganese	ppb	50	0.1	0.1
Sodium	ppm	n/a	33	13-53
Sulfate	ppm	250	13	11-17

We, at Magnolia Water Department, work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources which are the heart of our community, our way of like, and our children's future.

This CCR Report was prepared in collaboration with Delaware Rural Water Association and Magnolia Water Department.