Annual Drinking Water Quality Report for 2019
Fairway's Water System
Route 199 Red Hook, NY 12571
(Public Water Supply ID# 1330342)

INTRODUCTION

To comply with State regulations, Fairway's Water will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

In August of 2012, ownership of your system was transferred to the Dutchess County Water & Wastewater Authority. This report is partly based on information that was transferred to the Authority at that time. If you have any questions about this report or concerning your drinking water, please contact **Dutchess County Water & Wastewater Authority at (845)486-3601.** We want you to be informed about your drinking water. If you want to learn more about the Dutchess County Water & Wastewater Authority, please visit our website at WWW.DCWWA.Org .

WHERE DOES OUR WATER COME FROM?

In general, 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 activities. Contaminants that may be present in source water include microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system is permitted to take up to 17,280 gallons of water per day from the aquifer underlying the well area of the Town of Red Hook. In 2019, the average daily usage was 5,358 gallons per day. In addition, the water system serves an estimated 168 people with approximately 48 service connections. Our water source is groundwater drawn from two 370-foot deep drilled wells that are located on the westerly side of Route 199 approximately 1000 feet north of the intersection of Routes 199 and 308. The water is chlorinated and pumped to a 20,000-gallon storage tank where the water is then transferred to a pneumatic (pressure) tank to supply adequate pressure prior to distribution.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include total coliform, inorganic compounds, nitrate, nitrite, lead and copper, total trihalomethanes, haloacetic acids, radiological, volatile organic compounds, and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test 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.

It should be noted that all drinking water, including bottled drinking 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 EPA's Safe Drinking Water Hotline (800-426-4791) or the Dutchess County Department of Behavioral and Community Health at (845) 486-3404.

In the following table, you will find many terms and abbreviations, which might not be familiar to you. To help you better understand these terms, we've provided the following definitions:

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

Parts per million (ppm) or milligrams per liter (mg/l) - One part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or micrograms per liter (ug/l) - One part per billion corresponds to one minute in 2,000 years or a single penny in $10,000,000.

Parts per trillion (ppt) or nanograms per liter (nanograms/l) - One part per trillion corresponds to one minute in 2,000,000 years or a single penny in $10,000,000,000.

Parts per quadrillion (ppq) or picograms per liter (picograms/l) - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

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

Millirems per year (mrem/yr) - measures of radiation absorbed by the body.

Million Fibers per liter (MFL) - million fibers per liter is a measure of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Units (NTU) - is a unit of measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Variance & Exemption (V&E) - state of EPA permission not to meet an MCL or treatment technique under certain conditions.

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

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

Maximum Contaminant Level (MCL) - The "Maximum Allowed" (MCL) is 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 "Goal" (MCLG) is 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 Level (MRDL) - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant 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 disinfectant to control microbial contamination.

Contaminants that may be present in source water include:

A. *Microbial contaminants*, such as viruses and bacteria, which 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 the result from urban stormwater 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, urban stormwater runoff, and residential uses.

D. *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can come from gas stations, urban stormwater runoff, and septic systems.

E. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities

TABLE OF DETECTED CONTAMINANTS

Disinfectants							
Contaminant	Date Of sample	Violation Yes/No	Level Detected (Ave./Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Free Chlorine	Daily In 2019	No	0.92 (0.35-1.99)	mg/l	N/A	4.0	Added for Disinfection
Total Trihalomethanes	7/17/18	No	4.59	ug/l	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHM's are formed when source water contains large amounts of organic matter.
Total Haloacetic Acids	7/17/18	No	3.2	ug/l	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.

Inorganic Contaminants							
Contaminant	Date Of sample	Violation Yes/No	Level Detected (Ave./Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Copper (See Footnote #1)	9/11-17/19	No	0.16 (ND-0.182)	mg/l	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (See footnote #2)	9/11-17/19	No	0.0006 (ND-0.0008)	mg/l	0	0.015	Corrosion of household plumbing systems; erosion of natural deposits
Barium	1/16/18	No	0.08	mg/l	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate (as Nitrogen)	1/14/19	No	0.74	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Arsenic	1/16/18	No	0.7	ug/l	N/A	10	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Antimony	1/16/18	No	3	ug/l	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Chromium	1/16/18	No	5	ug/l	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
Nickle	1/16/18	No	0.002	mg/l	N/A	N/A	Naturally occurring
Selenium	1/16/18	No	9	ug/l	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Notes:

1 – The level presented represents the 90th percentile of the 6 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, 6 samples were collected at your water system and the 90th percentile is an average of the two highest. This average is the reported value. The action level for copper was not exceeded at any of the sites tested.
2 – The level presented represents the 90th percentile of the 6 samples collected. The action level for lead was not exceeded at any of the sites tested.
Advisory: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no MCL violations. We are proud that the drinking water meets or exceeds all Federal and State requirements. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the maximum level allowed by the State. The EPA has determined that your drinking water is SAFE at these levels.

We are required to present the following information on lead in drinking water. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants and young children. It is possible that lead levels at your home may be higher than at other homes in the community because of materials used in your home's plumbing. Fairways 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 the 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2019, our system was compliant with all applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are several reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So, get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. To maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.