

***Annual Drinking Water Quality Report for 2021***  
***T/O Warwick – Bellvale Water District***  
***Warwick, NY***  
***Public Water Supply ID# 3503602***

## **INTRODUCTION**

To comply with State regulations, Bellvale Water District 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. 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.

If you have any questions about this report or concerning your drinking water, please contact the Water Department, at (845) 986-0630. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled board meetings. The meetings are held at 7:30 PM, at the town hall at 132 Kings Highway. Please call (845) 986-1124 ext.247 for meeting dates.

## **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 serves 100 people through 25 service connections. Our water source is two groundwater wells, located on the west end of Miriam Drive. The water is chlorinated prior to distribution.

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to the consumer is, or will become contaminated. See "Table of Detected Contaminants" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived from two drilled wells. The source water assessment has rated these wells as having a medium susceptibility to microbials and nitrates. These ratings are due primarily to the close proximity of a SPDES permitted discharge facility (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the septic systems that are located in the assessment area. In addition, the wells draw from a confined aquifer with the estimated recharge area within the selected time of travel and the overlying soils may not provide adequate protection from potential contamination. While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking

water standards for microbial contamination. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted in this report.

## 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, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological 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 Orange County Health Department at (845) 291-2331.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max ) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Antimony	<b>No</b>	03/03/21	0.6	ug/l	6	6	Erosion of natural deposits
Barium	<b>No</b>	03/03/21	0.0182	mg/l	2	2	Erosion of natural deposits
Fluoride	<b>No</b>	3/17/21	0.451	mg/l	N/a	2.2	Erosion of natural deposits
Lead	<b>No</b>	7/23/20	1.75 (2) ND - 1.97	ug/l	0	AL=15	Corrosion of Household systems
Copper	<b>No</b>	7/23/20	0.19 (1) 0.011- 0.294	mg/l	1.3	AL=1.3	Corrosion of galvanized pipes
Nickel	<b>No</b>	03/03/21	0.0010	mg/l	100	100	Naturally occurring
Nitrate	<b>No</b>	4/21/21	0.783	mg/l	10	10	Runoff from fertilizer use
Sodium	<b>No</b>	6/02/21	32.9	mg/l	N/A	** (see health effects below)	Naturally occurring
Total Trihalomethanes (TTHMs)	<b>No</b>	8/05/20	3.7	ug/l	N/A	60	By-product of drinking water disinfection
Uranium	No	2021	15.45 <sup>4</sup> Range 14.8-16.5	pCi/l	0	MCL = 20	Erosions of natural deposits
Net Alpha (3)	No	2021	9.63 <sup>4</sup> Range 7.2-11.8	pCi/l	0	15	Erosion of natural deposits

***Synthetic Organic Contaminants including Pesticides and Herbicides***

Perfluorooctanoic Acid (PFOA)	<b>No</b>	8-25-21	5.08 (1.25-5.08)	ng/l	n/a	10	Released into the environment from widespread use is commercial and industrial applications
Perfluorobutanoic Acid (PFOS)	<b>No</b>	8-25-21	1.54 (ND-1.54)	ng/l	n/a	n/a	Released into the environment from widespread use is commercial and industrial applications

***Synthetic Organic Contaminants including Pesticides and Herbicides***

Perfluoroheptanoic Acid (PFHpA)	<b>No</b>	6-9-21	9.15 (5.63-9.15)	ng/l	n/a	N/A	Released into the environment from widespread use is commercial and industrial applications
Perfluorobutanoic Acid (PFBA)	<b>No</b>	6-9-21 8-25-21	7.80 (4.56-7.80)	ng/l	n/a	n/a	Released into the environment from widespread use is commercial and industrial applications
Perfluoropentanoic Acid (PFPeA)	<b>No</b>	8-25-21	23.6 (13.6-23.6)	ng/l	n/a	n/a	Released into the environment from widespread use is commercial and industrial applications
Perfluorobutanesulfonic Acid (PFBS)	<b>No</b>	8-25-21	2.19 (1.44-2.19)	ng/l	n/a	n/a	Released into the environment from widespread use is commercial and industrial applications
Perfluorohexanoic Acid (PFHxA)	<b>No</b>	8-25-21	15.0 (10.7-15.0)	ng/l	n/a	n/a	Released into the environment from widespread use is commercial and industrial applications
Perfluoroheptanoic Acid (PFHpA)	<b>No</b>	8-25-21	9.15 (5.63-9.15)	ng/l	n/a	n/a	Released into the environment from widespread use is commercial and industrial applications
Perfluorohexan Acid (PFHxS)	<b>No</b>	8-25-21	0.961 (ND-0.961)	ng/l	n/a	N/A	Released into the environment from widespread use is commercial and industrial applications

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## Notes:

1 –The level presented represents the 90<sup>th</sup> percentile of the 5 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 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, five samples were collected at your water system and the 90<sup>th</sup> percentile value was the average of the two highest values. The action level for copper was not exceeded at any of the sites.

2 – The level presented represents the 90<sup>th</sup> percentile of the 5 samples collected. The action level for Lead was not exceeded at any of the sites tested.

\*\* Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

3 - Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Our Net Alpha reading is calculated by taking the lab results from Gross Alpha and subtracting off the Uranium value. Compliance is determined by calculating Running Annual Average.

4 – These values represent the highest Locational Running Annual Average for 2021 and show the range of all individual samples collected throughout the year.

## Definitions:

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs 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. MCLGs allow for a margin of safety.

**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.

**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 disinfectants to control microbial contamination.

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

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

**Milligrams per liter (mg/l):** Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (ug/l):** Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

**Nanograms per liter (ng/l):** Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion - ppt).

**Picocuries per liter (pCi/L):** A measure of the radioactivity in water.

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## WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

## INFORMATION ON RADON

Radon is a naturally-occurring radioactive gas found in soil and outdoor air that may also be found in drinking water and indoor air. Some people exposed to elevated radon levels over many years in drinking water may have an increased risk of getting cancer. The main risk is lung cancer from radon entering indoor air from soil under homes.

In 2021, we collected four representative water samples (one per quarter) that were analyzed for radon. The average of the four samples was 5002 picocuries/liter (pCi/l). For additional information call your state radon program (1-800-458-1158) or call EPA's Radon Hotline (1-800-SOS-Radon).

## **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2021, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements

## **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

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 a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ 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. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. 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.