

***Annual Drinking Water Quality Report for 2017***  
***Taconic Shores Property Owners Association Inc.***  
***53 Lakeshore Drive***  
***Copake, NY 12516***  
***(Public Water Supply ID# 1000237)***

## **INTRODUCTION**

To comply with State regulations, Taconic Shores Property Owners Association Inc. will annually issue 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 did not violate 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.

If you have any questions about this report or concerning your drinking water, please contact Lester (Bucky) Hosier, Chief of Maintenance at 518-329-0241. 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 board of directors meets on the third Friday of each month at 7:30pm in the clubhouse. Membership meetings are held on the third Saturday in April, June and October and on the second Saturday in August. Membership meetings which are also held in the clubhouse are at 10am.

## **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 level 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 less than 1,000 people through approximately 397 service connections. Our water source is three artesian wells. Well #1, #2, and #3 supplies a new pump house located at the maintenance department on Lincoln Road. Well #1 is approximately 120 feet deep, well #2 is approximately 60 feet deep and well 3 is approximately 60 feet deep. The system is configured such that any well could supply a zone if necessary. The water is tested and chlorinated each day prior to distribution.

The NYSDOH has completed a source water assessment of this source based upon available information. Possible and actual threats to this drinking water source were evaluated. The state water source assessment includes a susceptibility rating based on the risks 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 consumers is or will become contaminated. See section "Are there contaminants in our drinking water?" 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 previously mentioned, our water is derived from 3-drilled wells. The source water assessment has rated well #1, #2 and #3 as having a medium susceptibility to microbials and nitrates. Well #1, #2 and #3 are rated medium to high susceptibility to microbials, nitrates, industrial solvents and other industrial contaminants. Please note that our water is disinfected to ensure the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

County and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning and education programs. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us as noted below.

## **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, 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 Columbia County Health Department 518-828-3358.

The Columbia County Department of Health routinely monitors for constituents in your drinking water according to Federal and State laws. None of the compounds we analyzed for were detected in your drinking water. This table shows the results of their monitoring. All drinking water may reasonably be expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

**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
<b>Microbiological Contaminants</b>							
Total Coliform Bacteria	No	Monthly 2017	None	n/a	0	Any positive sample	
E. Coli	No	Monthly 2017	None	n/a	0	Any positive sample	
<b>Inorganic Contaminants</b>							
Copper	No	9/22/15	0.044 0.077 0.112 0.079 0.021 0.136 0.138 0.200 0.193 0.228 <sup>1</sup>	mg/L	n/a	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives
Lead	No	9/22/15	<0.001 0.015 <0.001 0.008 <0.001 0.008 0.003 0.008 0.004 0.020 <sup>2</sup>	mg/L	n/a	AL=.015	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	No	5/9/17 8/2/17 11/1/17	1.74 1.50 2.88	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	No	9/20/17	0.0003	mg/L	n/a	0.05	
Nickel	No	9/20/17	0.0005	mg/L	n/a		
Barium	No	9/20/17	0.005	mg/L	n/a	2	

**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
Chromium	No	9/20/17	0.004	Mg/L	n/a	0.1	
<b>Radioactive Contaminants</b>							
Ra-226 (Radium)	Pump 1 Pump 2 Pump 3		0.98 0.98	pCi/L pCi/L	0	5	Erosion of natural deposits.
Gross Alpha (including radium)	Pump 1 Pump 2 Pump 3		1.0 0.1	pCi/L pCi/L	0	15	Erosion of natural deposits.
<b>Disinfection Byproducts</b>							
Total Trihalomethanes	Pump 1 Pump 2 Pump 3		< 4.0 < 4.0	ug/l ug/l	n/a	MCL=80	By-products of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter

**Copper.** An essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level could suffer liver damage. People with Wilson’s Disease should consult their personal doctor.

**Lead.** Infants and children who drink water containing lead in excess of the action 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.

**Nitrate.** Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue- baby syndrome.

**Radium-226.** Some people who drink water containing radium 226 in excess of the MCL over many years may have an increased risk of getting cancer.

**Gross Alpha Activity.** Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

**Total Trihalomethanes.** Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

**Notes:**

1 – The level presented represents the ten sample sites collected and tested.

2 – The level presented represents the ten samples sites collected and tested.

**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 trillion parts of liquid (parts per trillion - ppt).

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

## **WHAT DOES THIS INFORMATION MEAN?**

### **Nitrates:**

As you can see by the table, our system had no violations, but we have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. Although nitrate was detected below the MCL, it was detected at 5.54 which is greater than one-half of the MCL. Therefore, we are required to present the following information on nitrate in drinking water:

“Nitrate in drinking water at levels above 10 mg/l is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.”

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

During 2017, our system was compliant with 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 a few reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with this necessity 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 may use up 6 gallons for every cycle, regardless of how many dishes are loaded. Maximize your water usage 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. Rate adjustments may be necessary in order to address these improvements. At TSPOA we 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. Please call our office at 518-329-0241 if you have questions.