

***Annual Drinking Water Quality Report for 2018***  
***Lake Vue Park Water District***  
***110 Bracken Road***  
***Montgomery, NY 12549***  
***(Public Water Supply ID# 3503544)***

**INTRODUCTION**

To comply with State and Federal regulations, the Lake Vue Park Water District issues an annual report describing the quality of its 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, in 2018, the system's water met all NYS drinking water health standards. Numerous contaminants have been tested for over the life of the system, with 2013 being the most recent year for which some parameters were tested. Although 8 (eight) of those contaminants have been detected none were found to be at a level higher than the State allows. This report provides an overview of the water quality since that time, which is the latest that some contaminants were tested. Since that time other contaminants have been tested, many multiple times, and are also part of this report. 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 system's office at 457-2642 or attend any of the regularly scheduled Town Board meetings. You can contact the Town Clerk's office (457-2660) or the Supervisor's office (457-2600) with any questions regarding these meetings.

**WHERE DOES YOUR 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 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.

The Lake Vue Park water system serves approximately 200 residents through 49 service connections. It has only one water supply source – a 200 feet deep groundwater, rock well. Prior to distribution the water is disinfected with liquid chlorine.

In this system, as with many others in our region, the chlorine reacts with manganese – a mineral deposited naturally in the water table. The chlorine causes the manganese to coagulate and settle in the distribution pipes, thereby discoloring the water. In an attempt to alleviate this problem, a liquid sequestering agent, polyphosphate, is added to the water just prior to the chlorine injection. To some extent this reduces the chlorine from reacting with minerals that cause. However, because of the manganese levels naturally found in this groundwater, it only provides minimal improvements. The ideal treatment is to remove the manganese with filtration. However, the cost of implementing filtration is considerable, especially for a small system such as Lake Vue Park's with its limited user base. The Town Board is exploring options to interconnect Lake Vue Park with the Town's larger water system that does not have the aesthetic quality issues and can provide a more reliable source of water.

## **ARE THERE CONTAMINANTS IN YOUR DRINKING WATER?**

As State regulations require, your drinking water is routinely tested for numerous contaminants, including but not limited to: total coliform, iron and manganese, nitrate, lead and copper, sodium, asbestos, inorganic chemicals of which there are 13, volatile organic compounds of which there are 53, synthetic organic compounds of which there are 41 and radiological testing. The table presented on the following page depicts which compounds were detected in your drinking water. The State allows the frequency of testing for some contaminants to be less than once per year, as the concentrations of these contaminants do not change frequently. Some of the data presented, though representative, are more than one year old as mentioned earlier in the report.

It should be noted that all drinking water, including bottled drinking water, might 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 in Goshen at 291-2331.

None of the compounds we analyzed for exceeded the State's maximum contaminant level (MCL). Those that were detected are listed in the table on the following pages.

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

As you will see by the table on the following page, Lake Vue Park had no violations. We have learned through analytical sampling that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

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

This past year Lake Vue Park was in compliance with all applicable State drinking water requirements.

## **IS YOUR WATER CONSIDERED HARD?**

Many customers enquire as to the hardness of their water. The most recent sampling has shown this system's water has a hardness level of 120 Mg/L, while it has been as high as 170 Mg/L in the past. Water with levels greater than 150 Mg/l is considered hard; greater than 300 Mg/L considered very hard. Water with a hardness concentration less than 75 Mg/l is considered soft.

## Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Potential Source of Contamination
Nitrate	No	4/12/2018	87	Ug/L	10,000	MCL = 10,000	Erosion of natural deposits
Sulfate	No	1/12/2017	32	Mg/L	N/A	MCL = 250	Naturally occurring
Nickel	No	1/12/2017	2.1	Ug/L	100	MCL = 100	Erosion of natural deposits
Barium	No	1/12/2017	110	Ug/L	2000	MCL = 2000	Erosion of natural deposits
Manganese (footnote 1)	No	2018 max.	120	Ug/L	N/A	MCL = 300	Naturally occurring; As with iron, manganese may form a coating on distribution pipes. These may slough off and cause brown blotches on laundered clothing or black particles in the water.
Lead	No	6/10/2016 thru 7/15/2016	4.8 (max) 2.9 (90 <sup>th</sup> ) <0.1 (min) (footnote 2)	Ug/L	0	AL = 15	Corrosion of household plumbing systems; naturally occurring
Copper	No	6/10/2016 thru 7/15/2016	130(max) 120 (90 <sup>th</sup> ) 17 (min) (footnote 2)	Ug/L	1300	AL = 1300	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Total Trihalomethanes	No	8/8/2018	3.0	Ug/L	N/A	MCL = 6	By-products of drinking water chlorination needed to kill harmful organisms. They are formed when source water contains large amounts of organic matter.
Haloacetic Acids	No	8/8/2018	1.3	Ug/L	N/A		By-products of drinking water chlorination needed to kill harmful organisms. They are formed when source water contains large amounts of organic matter.

**See notes on following page**

## Notes:

- 1 - As the table shows, our system has uncovered problems with manganese in the distribution system. According to Department of Health standards this is not a contamination problem, but an aesthetic problem that we are sequestering in an attempt to reduce its effects. The Food and Nutrition Board of the National research Council determined as estimated safe and adequate daily dietary intake of manganese to be 2000-5000 U<sub>g</sub>/L for adults. However, many people's diets lead them to consume even higher amounts of manganese, especially those who consume high amounts of vegetables or are vegetarian. The infant population is of greatest concern. It would be better if the drinking water were not used to make infant formula since it already contains iron and manganese.
- 2 - The level presented represents range of all results, as well as 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 lead and copper values detected at your water system. In this case, 5 samples were collected at your water system and the 90<sup>th</sup> percentile value is the average of the two highest values (2.9 ug/L for lead and 120 ug/L for copper).

## 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.

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

**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).

**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 the 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

## **HOW SUSEPTIBLE IS YOUR DRINKING WATER TO CONTAMINATION?**

The NYSDOH completed a source water assessment in previous years for this system that was 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 consumers 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, this water is derived from a drilled well. The source water assessment has rated this well as having a medium-high susceptibility to microbials and nitrates. These ratings are due primarily to the close proximity of three State Pollution Discharge Elimination System (SPDES) permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) that are located in the assessment area. In addition, the well draws from fractured bedrock and the overlying soils are not known to provide adequate protection from potential contamination. While the source water assessment rates our well 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 this office, as noted in this report.

Please be advised that any proposed development that occurs within the assessment area is carefully reviewed for potential impacts, both positive and negative, to our water source.

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

Although this 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 this 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 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.

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 up 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**

In order to maintain a safe and dependable water supply improvements must sometimes be made 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. We ask that all customers help protect their water sources, which is the heart of the community, your way of life and your children's future.