

Annual Drinking Water Quality Report for 2018
Town of Wallkill, Lorelei Water System
99 Tower Drive Bldg. A Middletown, N.Y. 10941
Public Water Supply ID# NY3503585

To comply with State and Federal regulations, The Town of Wallkill will be annually issuing a report describing the quality of the drinking water for the Lorelei Water System. 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 the Lorelei System did not violate a maximum contaminant level or any other water quality standard. Last year, we conducted tests for over sixty (60) contaminants and found none of those contaminants at a level higher than the State allows. 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 Tim Grogan, Water and Sewer Administrator, at 342-1668. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. The meetings are held at 7:30pm on the fourth Thursday of the month. If you are unable to attend, you may wish to watch the meetings on Spectrum channel 23. Dates and times of Water Committee meetings are announced at the Town Board meetings.

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 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.

Your water source is entirely a ground water (well) supply consisting of one well approximately 100 feet deep. During 2018, all of the water that was supplied came from beneath the ground and is referred to as ground water. During 2018, the water was pumped from the well to a chlorine contact tank. Chlorine is injected into the raw water to provide disinfection.

The Lorelei Water System has 46 connections, and services approximately 184 people. An average volume of approximately 6778 gallons per day was withdrawn from the well and approximately 6778 gallons per day were delivered to the customers served by the Lorelei Wells. In 2018, the annual charge for water was \$2.60 per thousand gallons.

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 consumers is, or will become contaminated. See Table I 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 a drilled well. The source water assessment has rated this well as having a medium to high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of two SPDES permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the low-level residential activity that are located in the assessment area. In addition, the well draws 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 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 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, inorganic compounds, nitrate, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. Table I, "Table of Detected Contaminants", 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, is more than one year old. A supplement containing all the test results is available for viewing by contacting Tim Grogan at the Water Department. Please call 342-1668. You may request a copy of the supplement containing these results.

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.

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.

New York State Law requires water suppliers to notify their customers about the risk of lead in your drinking water. It should be noted that your drinking water did not violate the action level for lead. 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 as a result of materials used in your home's plumbing. The Town of Wallkill 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2018, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

INFORMATION ON CRYPTOSPORIDIUM AND GIARDIA

New York State Law requires water suppliers to notify their customers about the risks of Cryptosporidiosis and Giardiasis. Cryptosporidiosis can be very serious for people with weak immune systems, such as chemotherapy, dialysis, or transplant patients, as well as people with Crohn's Disease or HIV infection. People with weakened immune systems should discuss with their health care providers the need to take extra precautions such as boiling water, using a certified bottle water, or specially approved home filter. Individuals who think they may have Cryptosporidiosis or Giardiasis should contact their health care provider immediately. Since the water supply for the Lorelei System is obtained from a well it is at a very low risk for the presence of Cryptosporidium and/or Giardia.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although your 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 your 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, especially during the present drought.

- ♦ 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, 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 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.
- ♦ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes, if it moved, you have a leak.

CLOSING

There are presently seven New York State Department of Health certified water operators employed by the Town of Wallkill. Each operator must receive continuing education throughout the year. We at the Town of Wallkill Water Department work around the clock to provide top quality water at every tap. We ask that all of our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.

PLEASE CALL MY OFFICE IF YOU HAVE ANY QUESTIONS. 342-1668

Tim Grogan
Water and Sewer Administrator

TABLE I

TABLE OF DETECTED CONTAMINANTS							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
INORGANIC COMPOUNDS							
Copper See Note (1)	No	9-8-17	90 th =0.2 (0.05 to 0.23)	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems.
Lead See Note (2)	No	9-8-17	90 th =8.1 (1.2 to 9.8)	ug/l	0	AL=15	Corrosion of household plumbing systems.
Barium	No	7-12-17	0.030	mg/l	2.0	MCL=2.0	Erosion of natural deposits.
Sodium	No	6-26-18	27.0	mg/l	N/A	*See health effects below	Naturally occurring.
Nickel	No	7-12-17	1.7	ug/l	N/A	N/A	Erosion of natural deposits.
Sulfate	No	7-1-14	13.5	mg/L	N/A	MCL=250	Erosion of natural deposits.
Nitrate	No	6-26-18	0.933	mg/l	10	MCL = 10	Runoff from fertilizer use.
DISINFECTION BYPRODUCTS							
Total Trihalomethanes (TTHM)	No	8-10-17	18	ug/L	N/A	MCL=80	Byproduct of drinking water chlorination.
Five Haloacetic Acids (HAA5)	No	8-10-17	7.7	ug/l	N/A	MCL= 60	Byproduct of drinking water disinfection needed to kill harmful organisms.

(1) - The level presented represents the 90th percentile of the six (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 or greater than 90% of the copper values detected at your water system. In this case five (6) samples were collected at your water system and the 90th percentile value was the average of the two highest values (0.2 mg/l). The action level for copper was not exceeded at any of the sites tested.

(2) - The level presented represents the 90th percentile of the six (6) samples collected. The action level for lead was not exceeded at any of the five (6) 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.

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.

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).

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