

TOWN OF CHESTER
ANNUAL REPORT FOR DRINKING WATER QUALITY 2017
Sugar Loaf Hills Water District
1786 Kings Highway
Chester, New York 10918
Public Water Supply ID #3503576

Introduction

To comply with State and Federal regulations, Sugar Loaf Hills Water District issues an annual 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 William Keller, the Water Operator at (845) 469-7000 x 322. We want you to be informed about your drinking water. If you want to learn more, attend any of our regularly scheduled Town Board meetings. The meetings are held on the second and fourth Wednesday of each month at 7:00 pm at the Town of Chester Town Hall, 1786 Kings Highway, Chester, New York.

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. It can also 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 Environmental Protection Agency (EPA) prescribe regulations that 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 Sugar Loaf Hills water supply, consisting of approximately one hundred eighty-five (185) service connections, draws groundwater from two (2) wells: Well #2 is approximately three hundred fifty feet deep; and Well #3, is approximately one hundred eight-two feet deep. Well #3 is our back up well. Recently we had to use Well #3 due to a pump failure in well #2. Testing was done prior to use and showed one positive test for total coliform and E-coli. The water is treated by a chlorination system prior to distribution to ensure bacteriologically safe and potable water.

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 that is based on the risk posed by each potential source of contamination, and on how easily contaminants can move through the geological 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 assessment provides resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived from two (2) drilled wells. The source water assessment has rated these wells as having a medium susceptibility to microbials. This rating stems primarily from:

- 1) The close proximity of low level residential activity.
- 2) Septic systems in the assessment area.
- 3) The wells draw from a confined aquifer having an estimated recharge area within the selected time of travel; thus the overlying soils may not provide adequate protection from potential contamination. Despite the fact that the source water assessment rates our wells as being susceptible to microbials, our water does undergo disinfection so as 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 regulation requires, we routinely test your drinking water for contaminants. These contaminants include total coliform, turbidity and inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds.

In 2005, there were 15 tests ran for the presence of total coliform in the raw water. Of those 15, one came up positive. In follow up testing during 2006, all fifteen tests came up negative. This single result was, by itself, not enough to constitute a violation. In 2007, two of the raw water tests showed the presence of total coliform, and one test showed the presence of E. coli in Well #3. However, these are not considered violations since the water is treated with chlorine prior to distribution, and the treated samples were all of an acceptable quality. In 2008, there was 1 positive result for E. coli in Well #3. In 2015, tests showed no indication of E. coli. In 2016, one test was conducted on Well #3 for total coliform and E. coli was present, which also occurred in 2017 as well. The single result was, by itself, not enough to constitute a violation. It is also not an issue with the mandated proper chlorination.

The table presented below depicts which compounds were detected in your drinking water. For some contaminants, the State allows us to test less than once per year. This is because the concentrations of these contaminants tend not to change frequently. As a result, some of the data you see below, 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
Total Trihalomethanes (TTHMs)	No	8/08/17	9.1	ug/l	N/A	MCL=80	By-Product of drinking water chlorination; needed to kill harmful organisms
Haloacetic Acids (HAA5's)	No	8/08/17	1.5	ug/l	N/A	MCL = 60	
Nitrate	No	10/04/17	0.790	mg/l	MCLG: 10	MCL =10	Runoff from fertilizer use
Lead ¹	No	6/23/15 6/24/15 5 samples	90 th %ile = 1.4 ¹ Range: 1 to 1.6	ug/l	0	AL=15	Corrosion of household plumbing systems
Copper ²	No	6/23/15 6/24/15 5 samples	90 th %ile = 76 ² range 20 to 83	ug/l	1300	MCL=1300	Corrosion of household plumbing systems
Barium	No	9/24/12	14	ug/l	2000	2000	Erosion of natural deposits.
Nickel	No	9/24/15	1.8	ug/l	100	MCL = 100	Erosion of Natural deposits.
Gross Alpha	No	6/18/14	3.64	pCi:l	0	MCL=15	Erosion of natural deposits.
Coliform (see note 3)	No	10/2/17	1 positive sample	N/A	0	TT = 2 positive samples/month	Naturally occurring in the Environment

1 – The level presented represents the 90 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 90th percentile is equal to or greater than 90% of the lead values detected at your water system. In this case, 5 samples were collected at your water system and the 90th percentile value was the average of the two (2) highest values detected among the five (5) samples collected, 1.4 ug/l.

2 – The level presented represents the 90 percentile of the 5 sites tested. A percentile is a value on a scale of 100 that indicates the percent of 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, 5 samples were collected at your water system and the 90th percentile value was the average of the two highest values, 76 ug/l. The action level for copper was not exceeded at any of the sites tested.

3 – The required number of repeat coliform samples were collected in response to the positive sample collected on 10/2/17. All repeat samples collected were negative for coliform; as such, this positive sample was never confirmed and no additional action was required.

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 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.

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

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 2014, a sample was collected that was analyzed for radon. The result of that sample was 760 pCi/l. For additional information call your state radon program (1-800-458-1158) or call EPA's Radon Hotline (1-800-SOS-Radon).

What Does This Information Mean?

As you can see by the "Table of Detected Contaminants", our system had no violations. Although our testing did detect the presence of some contaminants, the concentrations found were well below the level allowed by New York State requirements.

Is Our Water System Meeting Other Rules That Govern Operations?

During 2017, our system was in compliance with all applicable New York State drinking water 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?

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, helping to avoid severe water use restrictions so that essential firefighting 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.

Closing

Thank you for allowing us to continue to provide your family with high 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 pumps, wiring, and piping in both wells were replaced in 2017. Improvements costs may be reflected in the rate structure. Rates adjustments may be made, if necessary, in order to fund these improvements. There is no increase at this time. We ask that all our customers help us protect our water sources, the heart of our community. Please call our office if you have any questions.