

TOWN OF CHESTER
ANNUAL REPORT FOR DRINKING WATER QUALITY 2016
Surrey Meadows Water District
1786 Kings Highway
Chester, New York 10918
Public Water Supply ID #3503582

Introduction

To comply with State and Federal regulations, Surrey Meadows 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 Surrey Meadows water supply, which consists of approximately two hundred forty-one (241) service connections, is groundwater drawn from three wells: Currently in use are Wells #9 (gravel well approximately seventy feet deep) and Well #6R (a rock well approximately five hundred feet deep). Well #10 (gravel well approximately seventy feet deep) is currently not in use as we have sufficient water from the other two wells. A fourth well, old Well #9, is no longer in use in light of its structural irregularities and has been filled in. The supply is treated by a chlorination system to ensure bacteriologically safe, potable water. Well #9 and #6R are commingled prior to distribution to the various service points. Water processed at the treatment plant also undergoes greensand filtration, primarily for the removal of manganese, but for iron as well.

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 three drilled wells. The source water assessment rates these wells as having a medium to medium-high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. 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 does rate our wells as being susceptible to microbials, please note that our water is disinfected 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. 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
Lead ¹	No	6/23/15 6/25/15 6/29/15 6 Samples	90 th ile= 14.6 1 Range 1-27	ug/l	0	AL=15	Corrosion of household plumbing systems
Nitrate	No	5/04/16	0.320	Mg/l	10	MCL=10	Run off from fertilizer use.
Copper ²	No	6/23/15 6/25/15 6/29/15 6 samples	90 th ile= 248 ² range 25 - 400	ug/l	1300	MCL=1300	Corrosion of household plumbing systems,
Sodium ³	No	5/04/16	37	mg/l	N/A	See Note 3	Naturally occurring; road salt
Nickel	No	8/03/16	2.8	ug/l	100	MCL=100	Erosion of natural deposits
Barium	No	8/03/16	0.076	mg/l	2	MCL=2	Erosion of natural deposits
Total Trihalomethanes (TTHMs)	No	8/09/16	6.4	ug/l	N/A	MCL=80	By-product of drinking water disinfection needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Haloacetic Acids (HAA5's)	No	8/09/16	1.2	ug/l	N/A	MCL = 60	
Arsenic	No	10/02/13	1.3	ug/l	N/A	MCL=10	Erosion of natural deposits
Sulfate	No	10/2/13	72.6	mg/l	N/A	MCL=250	Naturally occurring
Uranium	No	5/12/14	6.44 Range ND-6.44	ug/l	0	MCL = 30	Erosion of natural deposits.
Chromium	No	10/2/13	2.9	ug/l	100	MCL = 100	Erosion of natural deposits.

1 - The level presented represents the 90 percentile of the 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 to or greater than 90% of the lead values detected at your water system. In this case, 6 samples were collected at your water system and the 90th percentile value had a detected value of 14.6 ug/l. Although the action level for lead was exceeded at only one of the sites tested, it was not enough to constitute a violation.

2 - The level presented represents the 90 percentile of the 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 to or greater than 90% of the copper values detected at your water system. In this case, 6 samples were collected at your water system and the 90th percentile value of the six (6) samples, was 248 ug/l. The action level for copper was not exceeded at any of the sites tested.

3 - 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 (MCLD) – 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).

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

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.

What Does This Information Mean?

As you can see by the “Table of Detected Contaminants”, our system had no violations. We have learned through our testing that some contaminants have been detected; these, however, were detected below the levels allowed by New York State requirements.

Although we did not violate the 90th percentile value for lead, we did exceed the action level for lead at one location and provide the following information on 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. Walton Lake 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 2016, our system was in compliance with applicable State drinking water rules and regulations.

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 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 our customers. Rates adjustments may be necessary in order to address these improvements. The cost of these improvements may be reflected in the rate structure. 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.