TOWN ADMIN

2019 Consumer Confidence Report

Your Annual Drinking Water Quality Information

Cheshire Water Department

80 Church Street, Box S, Cheshire, MA 01225

Massachusetts Department of Environmental Protection Public Water Supply ID# 1058000

This report provides a snapshot of the drinking water quality that was achieved last year. Included are details about where your water comes from, what it contains and how its quality compares to state and federal standards. We are committed to providing you with information because informed customers are our best allies.

PUBLIC WATER SYSTEM INFORMATION

The Town of Cheshire Water System provides water to 565 homes and businesses. To ensure that we provide the highest quality of water available, your water system is operated by a Massachusetts certified operator who oversees the routine and day-to-day operations of our system. Our water system is also routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP) for its technical, financial, and managerial capacity to provide safe drinking water to you. Routine inspections by both us and MassDEP help to determine the effectiveness of existing water treatment and to determine if any additional treatment is required. A process to for treating moderately hard water is currently used to prevent build-up in the water distribution system. All chemical coagulation is approved for drinking water by the American Water Works Association. Disinfection treatment is not required due to the high quality of your water. Our last MassDEP Sanitary Survey Inspection was conducted in August of 2018. All identified concerns have been, or are currently being addressed. As a part of our commitment to you, we make regular repairs and improvements to our water system on an ongoing basis. Major repairs were made to the screens located in Well 02G in 2017, a Master Plan was completed for our water system in 2018, and in 2019 we began a project to replace water mains throughout the town.

OPPORTUNITIES FOR PUBLIC PARTICIPATION

The Water Commissioners meet every Tuesday evening at 6:30 at the Cheshire Town Hall. The public is welcome to attend and discuss any water related issues or concerns. You may also visit the Town of Cheshire website at: http://cheshire-ma.com.

YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

Cheshire's water comes from manifolded groundwater wells located east of Route 8 on Pump Station Road. The sources are designated by MassDEP as Source Name and ID Source Number 1058000-02G [New Well] and 1058000-03G [Well 2]. The two wells are gravel packed, with an output capacity of 410,000 gallons per day. Water is stored in a 450,000 gallon storage tank located on West Mountain Road prior to distribution. The town's former water source, Kitchen Brook Reservoir, has been disconnected from the system and is available only in the event of a water emergency.

How are These Sources Protected?

MassDEP has prepared a Source Water Assessment Program (SWAP) Report for the water supply sources serving this water system. The SWAP Report assesses the susceptibility of public water supplies. A susceptibility ranking of "high" was assigned to this system using the information collected during the assessment by MassDEP, which included the absence of hydrogeological barriers that can prevent potential contaminant migration from the surface. Typical agricultural, commercial, industrial, and residential land uses can contribute to contamination. The complete SWAP report is available at the Town Hall, Cheshire Library, or online at https://www.mass.gov/service-details/the-source-water-assessment-protection-swap-program . For more information you may also contact the MassDEP Western Region Office at (413) 755-2215.

Residents can help protect sources by:

- *practicing good septic system maintenance,*
- *supporting water supply protection initiatives at the next town meeting*
- *taking hazardous household chemicals to hazardous materials collection days,*
- *contacting the water department or Board of Health to volunteer for monitoring or education outreach to schools,*
- *Limiting pesticide and fertilizer use, etc.*

SUBSTANCES FOUND IN TAP WATER

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 activity. Contaminants that may be present in source water include.

Microbial contaminants - such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic contaminants - such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff. industrial, or domestic wastewater discharges, oil and gas production, mining, and farming.
Pesticides and herbicides - which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
Organic chemical contaminants - Including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
Radioactive contaminants - which can be naturally occurring or be the result of oil and gas production and mining activities.

COMPLIANCE WITH REGULATIONS

Does Drinking Water Meet Current Health Standards?

We are committed to providing you with the best water quality available. However, some contaminants that were tested last year did not meet all applicable health standards regulated by the state and federal government. Due to a total coliform bacteria contaminant violation during the period of September 10-12, our system performed a Level 1 Assessment, to determine the cause of total coliform bacteria contamination, and disinfected the affected areas of contamination with a chlorine solution. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

IMPORTANT DEFINITIONS

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known expected risk to health. MCLG's allow for a margin of safety.

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

90th Percentile - Out of every 10 homes sampled, 9 were at or below this level.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Secondary Maximum Contaminant Level (SMCL) – These standards are developed to protect aesthetic qualities of drinking water and are not health based.

Unregulated Contaminants – Contaminants for which EPA has not established drinking water standards. The purpose is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Method of Detection Limit (MDL) - The minimum concentration of a substance that can be measured and reported with 99% confidence the analyte concentration is greater than zero and determined from analysis of a sample in a given matrix containing the analyte

Level 1 Assessment – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in a water system.

Massachusetts Office of Research and Standards Guidelines (ORSG) - This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure.

WATER QUALITY TESTING RESULTS

The water quality tables show the most recent water quality testing results where levels were detected and compares those levels to standards set by the Environmental Protection Agency and Massachusetts Environmental Protection Agency.

MassDEP has reduced the monitoring requirements for perchlorate, Volatile Organic Contaminants (VOCs), inorganic contaminants (IOCs), and synthetic organic contaminants (SOCs), because the source is not at risk of contamination. The last sample was collected on 7/11/2017 for Perchlorate and VOC, 4/3/2012 for Synthetic Organic Contaminants, and 4/16/2014 for Inorganic Contaminants, and all were found to meet all applicable US EPA and MassDEP standards.

The water quality information presented in the table is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table. With the exception of those compounds noted on the tables below, all other compounds reported undetectable levels.

Regulated Contaminant	Date(s) Collected	Highest Result	Range Detected	MCL	MCLG	Violation (Yes/No)	Possible Source(s) of Contamination
INORGANIC CONTAMINANTS							
Nitrate (ppm)	*04/09/2019*	*1.26 (02G)* *1.26 (03G)*	*N/A*	*10*	*10*	*No*	*Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits*
RADIOACTIVE CONTAMINANTS							
Gross Alpha (pCi/l)	*07/21/2015*	*-0.146*	*N/A*	*15*	*0*	*No*	*Erosion of natural deposits*
Radium 226 & 228 (pCi/L) (combined values)	*07/21/215*	*.216*	*N/A*	*5*	*0*	*No*	*Erosion of natural deposits*

UNREGULATED AND SECONDARY CONTAMINANTS						
Contaminant (units)	**Dates Collected**	**Result or Range Detected**	**Average Detected**	**SMCL**	**ORSG**	**Possible Source(s) of Contamination**
Sodium (ppm)	*4/11/2017*	*37.2*	*N/A*	*N/A*	*20*	*Natural Sources, runoff from use of salt on roadways, byproduct of water treatment process.*
**Some people who drink water containing sodium at high concentrations for many years could experience an increase in blood pressure.*						

LEAD AND COPPER – Third Quarter 2017						
Contaminant (units)	**Action Level**	**90th Percentile**	**Number of Sites Sampled**	**Number of sites above the Action Level**	**Possible Sources of Contamination**	**Violation (Yes/No)**
Lead (ppb)	*15*	*ND*	*5*	*0*	*Corrosion of household plumbing*	*No*
Copper (ppm)	*1.3*	*.44*	*5*	*0*	*Corrosion of household plumbing*	*No*

Bacteria	MCL / TT	MCLG	Value	Date(s)	Violation (Y/N)	Possible Source(s) of Contamination
Total Coliform Bacteria	MCL	0	Positive	09/10 and 9/12/2019	Y	Human and animal fecal waste
During our routine sampling on September 10th, total coliform bacteria was discovered in two distribution samples. Samples taken from the wells, storage tank, and point of entry to the distribution system all returned free of bacteria. Follow up sampling on the 12th helped us determine the section of our distribution system that may have been compromised. A Level 1 Assessment was completed and it was determined that appropriate disinfection was not performed after repairs were made to a section of the water system. This portion of the water system was then appropriately disinfected, flushed, and retested, with no bacteria found in any follow ups samples.						

ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (ug/l)
pCi/l = picocuries per liter (a measure of radioactivity)
N/A = Not Applicable
ND = Not Detected

HEALTH NOTES

In order to ensure that tap water is safe to drink, the Department of Environmental Protection (MA DEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. All drinking water, including bottled water, may reasonably be 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 Environmental Protection Agency Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800)-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Cheshire Water Department 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 or at hrtp://www.epa.gov/safewater/lead.

Cross connections are potentially hazardous situations for public or private potable water supply and a source of potable water contamination. A cross connection is any potential or actual physical connection between potable water supply and any source through which it is possible to introduce any substance other than potable water into the water supply. Common Cross connection scenarios are a garden hose whose spout is submerged in a bucket of soapy water or connected to a spray bottle of weed killer.

Cross connections between a potable water line and a non-potable water system or equipment have long been a concern of the Department of Environmental Protection (MA DEP). MA DEP established regulations to protect the public health of water consumers from contaminants due to back-flow events. The installation of back-flow prevention devices, such as a low-cost hose bib vacuum breaker, for all inside and outside hose connections is recommended. You can purchase this at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in your community. For additional information on cross connections and on the status of your water system's cross connection program, please contact:

Cheshire Water Department
Travis Delratez / Water Superintendent
8 Church Street / Cheshire, MA 01225
Phone: (413) 743-1690 x16

For more information regarding our system you may also visit the EPA website at:
http://www.epa.gov/enviro/facts/sdwis/search.htm

This report is a compilation of best available data sources including: licensed operators' reports, water supply owner's coordination, MassDEP public records and EPA online records. The report represents an accurate account of your water quality to the best of our knowledge. Prepared by Housatonic Basin Sampling & Testing on behalf of your water supplier.