ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2016



Presented By The Torrington Water Company

Dear Customer:

Once again we are proud to present our annual water quality report, covering the period between January 1 and December 31, 2016. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at any hour—to deliver the highest-quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

We serve just over 10,000 customers in Torrington and portions of Harwinton, Burlington, Litchfield, and New Hartford.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

Thank you,

Susan M. Suhanovsky, President

Source Water Protection

The Torrington Water Company's commitment to providing the highest-quality water is evidenced by the efforts we take to protect our reservoirs from contamination. We own over 70 percent of our total watershed and maintain it in a forested state. We are vigilant in monitoring activities on those lands. There are no industrial or commercial activities on the watershed that could lead to chemical contamination of our supply.

Source water is untreated water from streams, rivers, lakes, or underground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source is important. Here are some things that you can do to help make sure that your water supply is protected:

- Pump and inspect your septic systems regularly.
- Use chemicals such as pesticides and cleaning products wisely.
- Dispose of waste chemicals and used motor oil properly. That is, don't pour chemicals on the ground or down the sink drain, toilet, or storm drain.

Report illegal dumping, chemical spills, or other polluting activities to CT DEEP's 24-hour hotline (860) 424-3338, Torrington Water at (860) 489-4149, or your local police.

Important Health Information

Sources of lead in drinking water includes corrosion of household plumbing system and erosion of natural deposits. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Sources of copper in drinking water includes corrosion of household plumbing system, erosion of natural deposits, and leaching from wood preservatives. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who

drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

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 adults, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by the *Cryptosporidium* parasite and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Source Water Assessment

A water assessment of The Torrington Water Company was completed by the Department of Public Health, Drinking Water Section, in 2002. The assessment report can be found on the Department of Public Health's website: http://www.dir.ct.gov/dph/Water/SWAP/Community/CT1430011.pdf.

The assessment found that this public drinking water source has a low susceptibility to potential sources of contamination.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include the following:

- **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

- **Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

- **Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses;

- Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm-water runoff, and septic systems;

- **Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.



Lead in Home Plumbing

f present, elevated levels of lead L 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. We are 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 www.epa.gov/lead.

Water Conservation

You can play a role in conserving water and saving yourself money in the process 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. Here are a few tips:

- 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 an invisible toilet leak. Fix it and you can 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.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Steven Cerruto, Vice President of Operations, at (860) 489-4149. Please visit our website at www. torringtonwater.com for more information about The Torrington Water Company.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains.

Flushing maintains water quality in several ways. For example, flushing removes sediments such as iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Also, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen, disinfectant levels, and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses during that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water in order to prevent sediment accumulation in your hot water tank.

Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

Where Does My Water Come From?

The water for Torrington and the surrounding towns we serve comes from two primary reservoirs. The Torrington Water Filtration Plant draws water from the Reuben Hart reservoir, located in Torrington, which is supplemented by North Pond, located in Norfolk. This source supplies the bulk of water to our system and has been the primary source of water for Torrington since 1930. Allen Dam, located in Torrington, is an integral part of our reservoir system. It is supplemented by Whist Pond, located in Goshen. It is primarily used during drought conditions or emergencies. In 2016, we relied heavily on Allen Dam, as Connecticut experienced a severe drought.

We vigilantly monitor the water and activities on the surrounding land to safeguard our water supplies. We believe protecting the source is the single most important measure we can employ to protect your health. To this end, we maintain our watershed area in a forested condition.

Drinking water travels to your home via a 169-mile network of water mains, five booster pumping stations, and eight distribution system storage tanks. We produced a total of 895 million gallons of water in 2016, and delivered approximately 2.3 million gallons per day to our customers.



Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of different contaminants. Our water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information below represents only those substances that were detected; our goal is to keep all detects below their respective maximum allowed levels. The State allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2016	15	0	0.164	NA	No	Erosion of natural deposits
Barium (ppm)	2016	2	2	0.0093	NA	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Combined Radium (pCi/L)	2016	5	0	0.805	NA	No	Erosion of natural deposits
Haloacetic Acids [HAA] (ppb)	2016	60	NA	25 (average)	12–39	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] ¹ (ppb)	2016	80	NA	43 (average)	2–83	No	By-product of drinking water disinfection
Turbidity ² (NTU)	2016	TT	NA	0.11	0.03-0.11	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2016	TT = 95% of samples < or = 0.3 NTU	NA	100	NA	No	Soil runoff
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Tap water samples were collected for lead and copper analyses from sample sites throughout the community

(UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2014	1.3	1.3	0.12	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2014	15	0	1.6	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2016	200	NA	21	50-200	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2016	250	NA	10	NA	No	Runoff/leaching from natural deposits
Color (Units)	2016	15	NA	<1 (average)	ND-20	No	Naturally occurring organic materials
Copper (ppm)	2016	1.0	NA	0.0028	NA	No	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride (ppm)	2016	2.0	NA	0.84	0.58–1.50	No	Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories
Manganese (ppb)	2016	50	NA	3.6	NA	No	Leaching from natural deposits
pH (Units)	2016	6.5-8.5	NA	7.4	6.8-8.4	No	Naturally occurring
Sulfate (ppm)	2016	250	NA	12	NA	No	Runoff/leaching from natural deposits; industrial wastes

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2016	1.7	NA	By-product of drinking water disinfection
Calcium Hardness (ppm)	2016	10	NA	Naturally occurring calcium
Chloroform (ppb)	2016	26	NA	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2016	1.1	NA	By-product of drinking water disinfection
Sodium (ppm)	2016	9.6	NA	Naturally occuring

UNREGULATED CONTAMINANT MONITORING RULE – PART 3 (UCMR3)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Chlorate (ppb)	2015	340	64–340
Chromium (ppb)	2015	0.20	0.13-0.20
Chromium-6 (ppb)	2015	0.20	0.03-0.20
Strontium (ppb)	2015	16	10–16
Vanadium (ppb)	2015	0.40	0.30-0.40

¹Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

²Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

Definitions

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

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as LRAAs.

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

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): 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 contaminants.

NA: Not applicable.

ND (Not Detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or μg/L, micrograms per liter).

ppm (parts per million): One part substance per million parts water (or mg/L, milligrams per liter).

SMCL (Secondary Maximum Contaminant Level): SMCLs are established to regulate the aesthetics of drinking water like appearance, taste and odor.

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