

# Town of Enfield Department of Public Works Municipal Water Division

P.O. Box 373, Enfield, New Hampshire 03748 Tel. 603-632-4605 \* FAX 603-632-7391

## 2019 ENFIELD WATER SYSTEM CONSUMER CONFIDENCE REPORT

This report describes The Town of Enfield's drinking water sources and quality, and programs that protect your water supply. This publication conforms to federal regulations that require water utilities to provide you this information annually. It will help us keep you informed about upcoming federal, state and local policies, regulations and guidelines. We are also affiliated with organizations such as the American Water Works Association, Granite State Rural Water Association and The New England Water Works Association, as well as the New Hampshire Water Works Association. These organizations support us by providing technical assistance and training, and represent our concerns regarding water quality issues to the U.S. Congress.

## **Your Drinking Water Sources**

The Town of Enfield's water supply is provided by four bed rock wells, which are listed below. Groundwater is naturally filtered through soil; to this point no additional treatment has been required. The Enfield Water Department maintains disinfection equipment in the event of a microbiological contamination.

This chart lists the ground water sources utilized by the Town.

Source	<u>Capacity</u>	Major Aquifer
Prior I Well	64 gallons per minute	Lovejoy Brook
Prior II Well	30 gallons per minute	Lovejoy Brook
McConnell Well	125 gallons per minute	Lovejoy Brook
Marsh Well	36 gallons per minute	Moose Mountain

**Protecting Source Waters** 

Your source water has passed many water quality parameters set by state and federal agencies. Monitoring and protecting the lands surrounding wellfields and aquifers are important in sustaining high quality water for our community. The Water Department, with help from the EPA, NH Department of Environmental Services, Upper Valley Lake Sunapee Regional Planning Commission and Enfield Conservation Commission, has developed a comprehensive Wellhead Protection Area. This area encompasses approximately 1300 acres in Enfield and parts of Canaan to effectively protect our water and reduce the costs of sampling for some contaminants originating from petroleum and pesticide products.

## **Source Assessment Information**

The State of New Hampshire WSEB has provided the town with source water assessment information. This assessment focuses on vulnerability and potential contamination sites (PCS) within the source protection area. We are obligated to provide copies of this information upon request. This information can be obtained at the Town Offices, or a map showing the location of the PCS's can be viewed at the Public Works Facility on Lockehaven Road.

## Water Quality Testing

As operators our job is to provide this community with safe and pleasant drinking water 365 days a year. On a consistent water quality monitoring schedule, the Water Department collects samples from each source and sends them to the New Hampshire Department of Environmental Services Laboratory and other private independent labs to test for approximately 140 different potential contaminants as well as monthly bacteria testing. Last year your tap water met all EPA and State drinking water health standards. The Water Department safeguards its water supplies.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment facilities, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban 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 stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals which are byproducts 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.

MCLG MC	Prior 1	Prior 2 N	Marsh McConnell	Source of Contaminant	Health Effects Language

#### **Inorganic Contaminants**

Arsenic (ppb)	N/A	10	<0.001	<0.001	<0.001	<0.001	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	(For arsenic levels above 5 ppb and up and including 10 ppb) While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.
Barium (ppm)	2	2	0.081	.025	0.010	0.027	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits	of the MCL over many years could experience an increase
Nitrate (mg/l)	10	10	0.2	<1.0	0.9	0.6	Run-off from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and baby blue syndrome.

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Rad	ioacti	ve c	ont:	amı	nanı	ıs

*Radon	0	0	3500	2500	1100	2000	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation as photons and beta radiation.
**Radium 226	0	5	.18	0.5	.00	.01	Naturally occurring	Exposure will increase the risk of cancer
**Radium 228	0	5	.52	1.0	.48	.16	Naturally occurring	Exposure will increase the risk of cancer
Lead (ppm)		.015	<.001	<.001	<.001	<.001		
Copper (mg/l)		1.3	<0.02	<.020	<.02	<0.02		

We conducted our 8th round of lead & copper testing and are pleased to report that none of our test sites exceeded any MCL

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.

Maximum Contaminant Level (MCL): The highest level of a contaminant allowed in drinking water

Action Levels: Regulations set Action Levels for some contaminants, for example lead and copper. An Action Level is the concentration of a contaminant which triggers treatment or other requirements which a water system must follow.

Parts per million (ppm); part per billion (ppb): One Part per million is the equivalent of 1/2 of a dissolved aspirin tablet in a bathtub full of water (approximately 50 gallons). One part per billion is the

equivalent to 1/2 of a dissolved aspirin tablet in 1,000 bathtubs of water (approximately 50,000 gallons).

picoCurie per Liter (pCi/L): One micro gram per liter

Monitoring Waiver: The state requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

*Copper:* 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. Copper was tested at ten representative sites throughout our distribution system, in addition to daycares and schools within the system. All results were less than the set McL.

**Methyl Tertiary Butyl Ether (mtBe):** The State of New Hampshire required all water systems to resample for this gasoline additive to maintain our monitoring waiver. All samples showed no detection of this contaminant. However, there are potential contaminant sites located within our wellhead protection areas.

**Lead:** Infants and young children are typically more vulnerable to lead in drinking water than the general population. 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, or the source line from the main to your home. If you are concerned about elevated lead levels in your home's water, flush your tap for 30 seconds to 2 minutes before using your tap water or you may wish to have your water tested. Call the EPA's Safe Drinking Water Hotline (1-800-426-4791) for more information. Your system was tested at ten representative sites, in addition to daycares and schools within the system, and all sites were below the set McL.

<sup>\*</sup> Radon: EPA is in the process of setting a health standard for radon in public drinking water.

<sup>\*\*</sup> Radium 226 & 228 not to exceed 5pCi/L

**Radon:** Radon is a radioactive gas that you can't see, taste or smell. It can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. It is a known human carcinogen. Breathing radon can lead to lung cancer. Drinking water containing radon may cause an increased risk of stomach cancer. Presently EPA is reviewing a standard for radon in water.

*Fluoride:* The Town of Enfield does not add fluoride to the drinking water. The naturally occurring level in the drinking water averages 0.16 mg/l.

Some people may be more vulnerable to contaminants 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 providers. EPA/CDC guidelines on appropriate means to lesson the risk of infection are available from the Safe Drinking Water Hotline (1-800-426-4791).

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 can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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 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.

Security: Water system security has increased throughout this country. As system operators it is our responsibility to maintain a protection program for our water supply. We have a computer monitoring system that has proven to be a great asset to this department. As the threat level increases, as set by the Department of Homeland Security, we increase our patrols of your water system. If you see any suspicious activity around the water supply area, please report it to this department immediately.

*Projects*: The Town of Enfield is in the process of completing and asset management plan to assist with the identification of critical assets, capital planning and system funding. Some of the system component are reaching the end of their useful life and will need to be replaced. The system is funded exclusively through water rates that can be see at <a href="https://www.enfield.nh.us">www.enfield.nh.us</a>

Thank You: To all the system users who help us do our job by restraining pets and keeping snow cleared during winter months, thank you, we appreciate it. We also appreciate your patience when doing our periodic hydrant flushing.

## **Enfield Public Works Municipal Water Department Contacts**

Water Commissioners/Board of Selectmen:

Katherine Stewart, Meredith Smith & John W. Kluge Phone 632-5026 Email townhall@enfield.nh.us Director of Public Works: Jim Taylor Phone 632-4605 Email jtaylor@enfield.nh.us Water/Sewer Operator: Jason Darling Phone 632-4002 Email jdarling@enfield.nh.us Water/Sewer Operator: Leroy Neily Phone 632-4002

#### **For More Information About:**

Water Quality — call the U.S. Environmental Protection Agency's Safe Drinking Water Hotline 1 (800) 426-4791

State Drinking Water Quality — call New Hampshire Department of Environmental Services, Water Supply and

Engineering Bureau (603) 271-3503

This Report, the Water Supply System, or Conservation —contact the Enfield Public Works Department 632-4605

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# ASSESSMENTS & VIOLATIONS

The Enfield Water System was not required to perform any assessments in 2018.

The Enfield Water System violated a drinking water standard set specifically for radionuclides. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Test results for radionuclide sample(s) showed the following contaminant(s) have exceeded the enforceable MCL(s).

Contaminant	MCL (units)	Latest Sample Date	Latest Sample Value
Compliance gross alpha	15 pCi/L	AUGUST 21, 2018	18.4 pCi/L

MCL = Maximum Contaminate Level (The highest level of a contaminate allowed in drinking water)

# What does this mean?

**This is not an emergency**. If it had been, you would have been notified immediately. However, the following health effects language, as required by state and federal law, is provided for your review.

**For Compliance Gross Alpha violations:** "Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer."

#### What should I do?

It is not necessary to use alternate water; however, if you have specific health concerns, please contact your health care professional. General health related questions may be directed to Dave Gordon of the DES Environmental Health Program at (603) 271-4608.

## **Steps We Are Taking:**

The sample that exceeded the MCL was from the McConnell Well which is a backup well to Enfield's primary wells Marsh Well and Prior I Well. The McConnell Well is used infrequently at times of high demand such as an active fire or during drought conditions as a precaution. It is also active when one of the primary wells is out of service. Other times the well is off line. When the well is used the water is pumped in conjunction with the primary wells thus diluting the aggregate into an acceptable range. The Town is currently conducting a study of the water system and treatment options will be looked at for the McConnell Well. We will continue using this well sparingly until a treatment option is identified and funded. The well will also be monitored quarterly.