

RETURN ADDRESS:

Town of Exeter-DPW
13 Newfields Road
Exeter, NH 03833

DRINKING WATER.
POUR OVER THE FACTS.



Water Quality Report for 2013

Water Conservation Tips:

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your bill. Here are some suggestions:

Inside your home: (Conservation Kits are available by calling 773 - 6157)

- Fix leaking faucets, Pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets, and appliances
- Wash only full loads of laundry
- Do not use the toilet for trash disposal
- Take shorter showers
- Do not let the water run while shaving or brushing teeth
- Soak dishes before washing
- Run the dishwasher only when full

Outside your home:

- Water the lawn and garden in the early morning or evening
- Use mulch around plants and shrubs
- Repair leaks in faucets and hoses
- Use water-saving nozzles

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Town of Exeter Water & Sewer Department

EPA#: NH 0801010

Water testing performed in 2013

Is My Water Safe?

Absolutely. We are pleased to inform our customers that the quality of the tap water exceeds the quality standards set by the state and federal regulations.

This Annual Water Quality Report is written to keep you informed of the past year’s water quality results. The water is tested daily at the water treatment plant and weekly within the distribution system to ensure safe drinking water. Chlorine is regularly monitored in the system. Bacteria tests are done on a monthly basis. Within this report you will find a record of contaminants that were detected in the water. All water samples taken have shown that the water is safe to drink. In the past, there have been a reportable levels of arsenic in Lary Lane well source. A new regulation went into effect in 2006 regarding arsenic and Lary Lane well water has been just over the limit. We are minimizing the use of this source until a solution for treatment is determined. A more detailed explanation of this concern is found within this report.

Improvements have been made in the process at the water treatment plant to correct some deficiencies. Both process clarifiers have been rebuilt, all filter media has been replaced and new instrumentation was installed to allow better monitoring and reporting. These improvements were necessary to meet existing regulations and allow the plant to meet current demand and also allow the facility to operate on a 24 hour basis.

Other process testing and adjustments are being made to evaluate whether further improvements can be made with minimal expenditures that result in an improved water quality. At the same time, efforts are accomplishing reduced waste from normal process cleaning, reduced water losses from sampling stations, and greater attention to areas where recycling water can be achieved.

Where Does My Water Come From?

The sources of drinking water supply in the Town of Exeter are the Exeter River, Dearborn Reservoir, Lary Lane Well and Skinner Springs. The Exeter River and Dearborn Reservoir are surface water supplies, and are treated at the water treatment plant on Portsmouth Avenue. These source waters go through a five-step process to become finished water. Skinner Springs is also filtered at the water treatment plant. Studies have shown that the existing sources provide ample supply to meet current and future demands. Lary Lane well is only being used on an emergency basis at this time.

Though the water supplies have been ample, there continues to be deficiencies and challenges with the treatment processes. The Water & Sewer and Public Works Departments continue to investigate solutions for the water treatment deficiencies. This investigation has included consideration of new groundwater sources. The goal is to provide the most cost efficient solution with the least impact to the consumer.

Source Water Assessment Report

The New Hampshire Department of Environmental Services (NHDES) has prepared the Source Water Assessment Report for the sources serving this community water system, assessing the sources’ vulnerability to contamination. The results of the assessment, prepared on October 28, 2002, and last updated August 8, 2006, are as follows. The Dearborn Reservoir received three high susceptibility ratings, three medium susceptibility ratings, and six low susceptibility ratings. The Exeter River received three high susceptibility ratings, five medium susceptibility ratings, and four low susceptibility ratings. Lary Lane Well received two high susceptibility ratings, three medium susceptibility ratings, and seven low susceptibility ratings. Skinner Springs received two high susceptibility ratings, three medium susceptibility ratings, and seven low susceptibility ratings. The complete Source Water Assessment Report is available for inspection at the Exeter Water Treatment Plant or the NHDES Web site.

Please Note that this information is over 7 years old and includes information that was current at that time. Some ratings might be different if updated to reflect current information. Presently, the DES has no plans to update this data.

Working Hard for You

Customer service is a priority of the Exeter Water Department. We take customer calls seriously, documenting complaints and analyzing causes for concerns. Residents are the “inspectors” for our system. We appreciate residents taking the time to make a call. If you have questions or concerns regarding water quality, or the treatment process, do not hesitate to call. The following names and numbers are available for contacts and information.

During 2013 the Exeter Water Department was recognized for Treatment Optimization above and beyond the State and Federal Surface Water Treatment Plant regulations. We are one of six utilities recognized for this achievement among the twenty-one surface water treatment plants in the State of New Hampshire.

Please note the following numbers for more information:

Water/Sewer Department: Michael Jeffers — Water / Sewer Managing Engineer (603) 773 - 6157

Water Treatment Operations Supervisor / Primary Operator — Paul A. Roy, P.E. (603) 772 - 1346

24-Hour Emergency: Police Dispatch— (603) 772 - 1212

Town of Exeter Web site: www.exeternh.gov

New Hampshire Department of Environmental Services: www.des.nh.gov

Refer to the Exeter Newsletter or Local TV for announcements regarding water system issues

Consumer Confidence Report

Like any responsible public water system, our mission is to deliver the best quality drinking water and reliable service at the lowest, appropriate cost. Aging infrastructure presents a challenge to drinking water safety, and continuous improvement is needed to maintain the quality of life we desire for today and for the future. In the coming year we anticipate beginning some major improvements to the Distribution System and a new Water Treatment System to further improve the quality of our water. When considering the high value of water, it is truly a bargain to have a water service that protects the public health, fight fires, and supports businesses and the economy, and providing us with the high-quality life we enjoy.

This Consumer Confidence Report (CCR) details the quality of your drinking water. This report documents all detected Primary and Secondary Drinking Water Parameters and compares them to their respective Standards known as Maximum Contaminant Levels (MCLs).

How can I get involved?

You are invited to voice your concerns at any of the Water / Sewer Advisory Committee Meetings, usually held on the second Wednesday of every month. The Meetings are held in the Nowak Room which is on the second floor of the Town Office at 10 Front Street, at 6:30 PM, or check the Town’s Web Page or on Comcast Chanel 22 for the Meetings or announcements.

For more information about the Drinking Water, you can contact Paul A Roy, P.E., the Primary Operator for the Water System at (603) 772 - 1346

Substances That Might Be in Drinking 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. The U.S. Food and Drug Administration (FDA) 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, reservoir, springs, and wells. As water travels over the surface of land or through the ground, it can acquire naturally occurring minerals, in some cases, radioactive material; and 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, 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 which 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.

Arsenic Regulation

Low levels of arsenic are naturally present in water about 2 parts of arsenic per billion parts of water (ppb). Thus, you normally take in small amounts of arsenic in the water you drink. Some areas of the country, such as New Hampshire, have unusually high natural levels of arsenic in rock, which can lead to high levels of arsenic in water.

A new limit for arsenic of 10 ppb became effective in 2006. The level of arsenic at Lary Lane Well has historically averaged 11 ppb, but has decreased with limited usage. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. Exposure assumptions used to calculate Maximum Contaminant Levels include consuming two liters of water per day by a 154 lb adult for a 70-year exposure duration.

It is not necessary to use alternate water; however, if you have specific health concerns, please contact your health care professional.

Lary Lane Well is on a limited use schedule until a treatment solution has been implemented. Until treatment is provided, we anticipate violations. Notification of these violations will be given.

Radon

Radon is a radioactive gas that occurs naturally in some groundwater. It may pose a health risk when the gas is released from water into air, as occurs during showering, bathing, or washing dishes and clothes. Radon gas released from drinking water is a relatively small part of total radon in air. Radon is released into homes and groundwater from soil. Radon is a known human carcinogen. Samples taken of our groundwater source in 2002 indicated a radon concentration of 770 picocuries per liter (pCi/L). Inhalation of radon gas has been linked to lung cancer, and drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on how to have your home tested, call (800) SOS-RADON.

Lead in Drinking Water

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. This water system is responsible for high quality drinking water, but cannot control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water for drinking and cooking. Do not use hot water for drinking or cooking. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure are available from the Safe Drinking Water Hotline or at <http://water.epa.gov/drink/info/lead/index.cfm>



Abbreviations

BDL: Below Detection Limits

mg/l: milligrams per liter

NA: Not Applicable

ND: Non Detectable at testing limits

NTU: Nephelometric Turbidity Units

pCi/L: picocurie per Liter

ppb: parts per billion

ppm: parts per million

RAA: Running Annual Average

TTHM: Total Trihalomethanes

UCMR: Unregulated Contaminant Monitoring Rule

µg/L: micrograms per Liter

MFL: Million Fibers per Liter

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Imno-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 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 (Center for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Unregulated Contaminant Monitoring

Once every five years, under the 1996 Safe Drinking Water Act, the USEPA is required to issue a list of no more than 30 unregulated contaminants to be monitored by Public Water Systems.

During 2013, the Exeter Water Department participated in the 3rd Round of the USEPA Assessment Monitoring to look for emerging contaminants in Drinking Water. Of the 21, List 1 Contaminants, 5 Unregulated Contaminants were detected in the Exeter Water System. These detects will help the EPA assess the amount in drinking water and whether the levels are harmful or not. What was detected is listed here....

Regulated Substances	Year Sampled	Violation	MCL	MCL G	Amount Detected	Range	Units of Measure	Typical Source
Barium	2005	NO	2	2	0.012	0 to 0.3	ppm	Erosion of natural deposits
Arsenic ¹ (Lary Lane Well)	2013	NO	10	0	RAA 9.5	9 to 10	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
(Compliance) Gross Alpha	2005	NO	15	0	3	0 to 3	pCi/L	Erosion of natural deposits
Combined Radium	2005	NO	5	0	0.3	0 to 0.3	pCi/L	Erosion of natural deposits
Asbestos	2013	NO	7	7	ND	0	MFL	Decay of cement water mains
TTHM (Trihalomethanes)	2013	No	80	NA	RAA 73	26 to 169	ppb	By-product of drinking water chlorination
HAA5 (Haloacetic Acids)	2013	NO	60	NA	RAA 37	18 to 48	ppb	By-product of drinking water chlorination
Total Organic Carbon (removal ratio) ²	2013	NO	TT	NA	1.27	1.18 to 1.45	re-moval ratio	Naturally present in the environment
(Compliance) Gross Alpha	2005	NO	15	0	2	2	pCi/L	Erosion of natural deposits
Combined Radium	2005	NO	5	0	0.7	0.7	pCi/L	Erosion of natural deposits
Turbidity ³	2013	NO ⁴	TT	NA	.034	.015 to .219	NTU	Soil runoff
Total Coliform Bacteria	2013	NO	0	0	0	0		Naturally present in the Environment and are indicators of potentially harmful bacteria
Total Organic Carbon (TOC)	2013	NO	TT	N/A	2.8	2.0 to 3.5	ppm	Naturally present in the Environment
Copper ⁵	2013	NO	Action Limit= 1.3	1.3	0.120	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead ⁵	2013	NO	Action Limit= 15	0	0	1	ppb	Corrosion of household plumbing systems; erosion of natural deposits;

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

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

¹Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

²The value reported under Amount Detected for Total Organic Carbon (TOC) is the lowest ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value greater than one indicates that the water system is in compliance with the TOC removal requirements.

³Turbidity is a measurement of the cloudiness of the water. Turbidity is monitored because it is a good indicator of the effectiveness of our filtration system. High turbidity can hinder the effectiveness of disinfection.

⁴Any measurement in excess of 1 is a violation unless otherwise approved by the state. Also, if more than 5% of any one month’s combined filter effluent samples are above the TT value of 0.3 NTU, this would constitute a TT (Treatment Technique) violation.

⁵Tap water samples were collected for lead and copper analyses from 30 homes throughout the service area. The next round of samples are due in 2016.

Hexavalent Chromium	Amount Detected	0.032 to 0.046	µg/L	Average	0.037	µg/L
Chlorate	Amount Detected	28 to 650	µg/L	Average	224	µg/L
Strontium	Amount Detected	56 to 130	µg/L	Average	94	µg/L
Chromium	Amount Detected	0.32 to 0.59	µg/L	Average	0.46	µg/L
Molybdenum	Amount Detected	1.5 to 1.8	µg/L	Average	1.33	µg/L