

2023 Consumer Confidence Report

Litchfield

PWS # 1371010

What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the Quality of your drinking water, where it comes from, and where you can get more information. This annual report documents all detected primary and secondary drinking water parameters and compares them to their respective standards known as Maximum Contaminant Levels (MCLs).

NOW IT COMES WITH A
LIST OF INGREDIENTS.



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, 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 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 stormwater runoff, and residential uses.

Organic chemical contaminants, including per- and polyfluoroalkyl substances, synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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

What is the source of my drinking water? The Primary Water Sources of the Litchfield Water System are the Pennichuck Water Works core system and a well located in Litchfield which are owned by the Town of Hudson. Hudson treatment for the well consists of chlorine for disinfection, pH adjustment for corrosion control, and phosphate addition for corrosion control and iron and manganese sequestration.

Pennichuck Water Work's using two primary sources of supply for the Nashua Core system; the Merrimack River, and the Pennichuck Brook. Water is conveyed from both sources to our surface water treatment plant where it is treated to remove organic matter and other constituents found in surface water supplies utilizing modern treatment technologies and methods, in accordance with federal and state standards. Water is then disinfected using chlorine for primary disinfection and distribution system disinfection.

in 2020 and 2021, annual average daily demand 505,000 gallon per day (gpd) and a maximum approximately 845,000 gpd.

Why are contaminants in my water? 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's Safe Drinking Water Hotline at 1-800-426-4791.

Do I need to take special precautions? 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 about drinking water from their health care providers. EPA/CDC 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 1-800-426-4791.

Source Water Assessment Summary

NHDES prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment, prepared on 12/11/00, 7/5/01 and 10/25/01 are noted below.

Source Name	Low	Med	High
Harris Pond Reservoir	6	3	2
Supply Pond / Springs	6	3	2
Merrimack River	2	4	5
Gravel Pack Well -Weinstein	9	2	1
GPW-Dame - off-line	9	1	2
GPW-Ducharme- off-line	7	3	2

Note: Due to the time when the assessments were completed, some of the ratings might be different if updated to reflect current information.

The complete Assessment Report is available for review. For more information, call Matt Day at 800-553-5191 or visit the [NHDES website](#).

How can I get involved?

For more information about your drinking water, please call our laboratory at 800-553-5191 or send an email to customer-service@pennichuck.com. Although we do not have specific dates for public participation events, feel free to contact us with any questions.

Violations and Other information: We are pleased to report that your drinking water meets or exceeds all federal and state requirements.

Drinking Water Contaminants:

Lead: 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 from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water for drinking and 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 at 1-800-426-4791 or at [US EPA Basic Information about Lead in Drinking Water](#).

Definitions

Ambient Groundwater Quality Standard or AGQS: The maximum concentration levels for contaminants in groundwater that are established under RSA 485-C, the Groundwater Protection Act.

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

Maximum Contaminant Level or MCL: 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.

Maximum Contaminant Level Goal or MCLG: 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.

Maximum Residual Disinfectant Level or 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 or 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 contaminants.

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

Abbreviations

NA: Not Applicable

ND: Not Detectable at testing limits

pCi/L: picoCurie per Liter

ppb: parts per billion

ppm: parts per million

ppt: parts per trillion

RAA: Running Annual Average

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

Litchfield 2022 Data

	Year Collected	90th Percentile	Action Level	MCLG	# of Sites Sampled	# Sites Above Action Level	Violation Yes/No	Typical Source of Contaminant
Lead (ppb)	7/21/22	0	15	0	27	0	No	Corrosion of household plumbing systems, erosion of natural deposits
Copper (ppm)	7/21/22	0.131	1.3	1.3	27	0	No	Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives

Disinfectant and Disinfection By-Products	Year Sampled	Average Detected	Range Low-High	MCL	MCLG	Violation Yes/No	Typical Source of Contaminant
Chlorine (ppm)	Monthly 2022	0.54	0.21 -1.08	4-MRDL	4-MRDLG	No	Water additive used to control microbes.
Total Trihalomethanes (ppb)	Quarterly 2022	25	12 - 36	80	0	No	By-product of drinking water chlorination.
Haloacetic Acids (ppb)	Quarterly 2022	10	6 - 16	60	0	No	By-product of drinking water chlorination.

Town of Hudson

Inorganic Contaminants	Year Collected	Highest Detect	Range Detected	MCL	MCLG	Violation Yes/No	Typical Source of Contaminant
Barium (ppm)	11/16/20	0.007	NA	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion or the natural deposits
Chromium (ppb)	11/16/20	4.0	NA	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Nitrate (ppm)	10/31/22	1.7	NA	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Organic chemical contaminants		Highest Detect	Range Detected	MCL	MCLG	Violation Yes/No	Typical Source of Contaminant
Perfluorooctanoic acid (PFOA)(ppt)	Monthly 2022	9.04	6.66 – 9.04	12	0	No	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems
Perfluorooctane sulfonic acid (PFOS) (ppt)	Monthly 2022	2.39	ND – 2.39	15	0	No	
Perfluorohexane sulfonic acid (PFHxS) (ppt)	Monthly 2022	2.37	ND – 2.37	18	0	No	

Secondary MCLs (SMCL)				50 % AGQS (Ambient groundwater quality standard)		AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
Date	Level Detected	Treatment technique	SMCL				
Chloride (ppm)	11/16/20	54	NA	250	N/A	N/A	Wastewater, road salt, water softeners, corrosion
Hardness (ppm)	11/16/20	56	NA	NA	N/A	N/A	Geological
Iron (ppm)	11/16/20	0.046	NA	0.30	N/A	N/A	Geological
Manganese (ppm)	11/16/20	0.04	NA	0.05	0.15	0.3	Geological
pH (SU)	11/16/20	6.80	NA	6.5-8.5	N/A	N/A	Precipitation and geology
Sodium (ppm)	11/16/20	41.0	NA	100-250	N/A	N/A	Road salt, septic systems (salt from water softeners) We are required to regularly sample for sodium
Sulfate (ppm)	11/16/20	8.9	NA	250	250	500	Naturally occurring

Pennichuck Water Works - CORE Water Quality

Turbidity	TT	Lowest Monthly % of Samples	Highest Detected Daily Value	Violation Yes/No	Typical Source of Contaminant		
Daily Compliance (NTU)	5	-----	0.23 on September 30, 2022	No	Soil Runoff		
Monthly Compliance*	At least 100%	100 % - All of the months of 2022	-----	No			
Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality.							
*Monthly turbidity compliance is related to a specific treatment technique (TT). Our system filters the water so at least 95% of our samples each month must be below the turbidity limits specified in the regulations.							
Inorganic Contaminants	Year Collected	Highest Detect	Range Detected	MCL	MCLG	Violation Yes/No	Typical Source of Contaminant
Barium (ppm)	7/7/2022	0.0076	NA	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion or the natural deposits
Nitrate (ppm)	7/7/2022	0.55	NA	10	10	No	Runoff from fertilize use; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (ppm)	Monthly 2022	Average 0.72	0 – 1.01	TT	NA	No	Naturally present in the environment
Organic Chemical Contaminants							
Perfluorooctanoic acid (PFOA)(ppt)	Quarterly 2022	RAA 6.23	2.87 – 10.6	12	0	No	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems

Secondary MCLs (SMCL)					50 % AGQS (Ambient groundwater quality standard)	AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
Date	Level Detected	Treatment Technique	SMCL				
Chloride (ppm)	7/20/22	74	N/A	250	N/A	N/A	Wastewater, road salt, water softeners, corrosion
Hardness (ppm)	7/20/22	19.5	N/A	N/A	N/A	N/A	Geological
Iron (ppm)	7/20/22	0.036	Carbon filter	0.3	N/A	N/A	Geological
Manganese (ppm)	7/20/22	0.0157	Carbon filter	0.05	0.15	0.3	Geological
Nickel (ppm)	7/20/22	0.0023	Not established; reporting is required for detections	N/A	0.005	0.01	Geological; electroplating, battery production, ceramics
pH	7/20/22	7.57	N/A	6.5 - 8.5	N/A	N/A	Geological; electroplating, battery production, ceramics
Sodium (ppm)	7/20/22	46.6	N/A	100-250	N/A	N/A	We are required to regularly sample for sodium
Sulfate (ppm)	7/20/22	6	N/A	250	250	500	Naturally occurring
Zinc (ppm)	7/20/22	0.237	N/A	5	N/A	N/A	Galvanized pipes

Secondary Maximum Contaminant Level or SMCL: They identify acceptable concentrations of contaminants which cause unpleasant tastes, odors, or colors in the water.

Pennichuck Water Works - CORE

Additional Tests	Date	Description of data requested	Highest Detect	Range Detected	Specific contaminant criteria and reason for monitoring
Unregulated Contaminant Monitoring Regulation 4					<i>Explain federal monitoring requirement</i>
Haloacetic Acids HAA5 (ppb)	2018/2019	Unregulated Contaminant Monitoring Regulation 4	21.6	4.4 - 21.6	The elements listed in this section are contaminants that do not have a standard set. These <i>contaminants</i> are monitored in order to provide information to the US Environmental Protection Agency, while they conduct evaluation on whether these contaminants should have a standard established.
Haloacetic Acids HAA6Br (ppb)	2018/2019	Unregulated Contaminant Monitoring Regulation 4	8.5	4.6 - 8.5	
Haloacetic Acids HAA9 (ppb)	2018/2019	Unregulated Contaminant Monitoring Regulation 4	28.9	8.6 – 28.9	
Manganese (ppb)	2018/2019	Unregulated Contaminant Monitoring Regulation 4	4.06	0.7 -4.6	
Germanium (ppb)	2018/2019	Unregulated Contaminant Monitoring Regulation 4	ND	ND	
Cyanotoxin Assessment Monitoring					<i>Explain federal monitoring requirement</i>
Total microcystin (ppb)	2020	Cyanotoxin Assessment Monitoring	ND	ND	The elements listed in this section are contaminants that do not have a standard set. These <i>contaminants</i> are monitored in order to provide information to the US Environmental Protection Agency, while they conduct evaluation on whether these contaminants should have a standard established.
Cylindrospermopsin (ppb)	2020	Cyanotoxin Assessment Monitoring	ND	ND	
Anatoxin-a (ppb)	2020	Cyanotoxin Assessment Monitoring	ND	ND	