

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. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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.

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 synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

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

Please use water wisely!

Water Efficiency Tip	Estimated Savings
Adjust sprinklers to prevent overspray and runoff	15-25 gallons/day
Repair leaks and broken sprinkler nozzles	10 gallons/minute/leak
Add 2" to 3" of mulch around trees & plants to reduce evaporation	20-30 gallons/day/1,000 sq. ft.
Install drip irrigation system for trees, shrubs, and flowers to get water to the plant's roots more efficiently	20-25 gallons/day
Upgrade to a "smart irrigation controller" that automatically adjusts watering times based on weather conditions	40 gallons/day
Replace your lawn and upgrade to WaterSmart landscape	33-60 gallons/day/1,000 sq. ft.
Use a broom instead of a hose to clean driveways and sidewalks	8-18 gallons/minute
Adjust your pressure reducer (if you have one) to keep pressure between 40 and 60 p.s.i.	Varies
While washing your car, use a self-closing nozzle for your hose	8-18 gallons/minute
Repair any leaks around pool and spa pumps	20 gallons/day/leak
Repair leaking hose bibs	15-20 gal./day/leak
Install covers on pool and spas to reduce evaporation	30 gallons per day
Install pressure reducer if your pressure is greater than 80 p.s.i.	Varies

Source Water Assessment Summary:

Note: This information is over 12 years old and includes information that was current at the time the report was completed. Therefore, some of the ratings might be different if updated to reflect current information. At the present time, DES has no plans to update this data.

Source Information		Summary of Susceptibility Factors		
		Low	Med	High
Source Name and Description	BRW 1	10	1	1
Source Name and Description	BRW 2	10	1	1

Source Water Assessments are prepared by the NH Department of Environmental Services and are conducted to identify potential contamination sources within the protection area of public water supply wells. This allows communities to develop and implement source water protection programs. The complete assessment report for the Autumn Woods system is available at the Derry Department of Public Works. For more information you may contact the DPW at 603-432-6144 or visit the NHDES website at <http://des.nh.gov/organization/divisions/water/dwgb/dwspp/reports/documents/derry.pdf>

Please Help Protect Drinking Water

You are probably already aware that certain activities on your property can affect the quality of groundwater. Most people who have septic systems are aware that their septic system discharges to the ground and thus to groundwater. Similarly, any gasoline, motor oil, paint, garden chemicals, lawn chemicals, or other household chemicals that are spilled, sprayed, spread, or dumped onto the ground can make their way into groundwater. Because your property is within the source water protection area of the Autumn Woods wells, activities on your property that affect

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.

How can I get involved? The Town of Derry invites its customers to become more involved with the Town's water quality efforts. The Derry Town Council, who act as the Water Commission, meet periodically to discuss issues that concern our customers. Council meetings are usually held on the first and third Tuesdays of each month at the Derry Municipal Center at 14 Manning Street. For more information you can call the Municipal Center or visit our website www.derrynh.org.



Town of Derry, New Hampshire

Autumn Woods Community Water System

ANNUAL WATER QUALITY REPORT

For testing done in 2021

PWS ID 0612220

To Our Customers at Autumn Woods,

The Town of Derry's ongoing mission is to provide safe and reliable drinking water to Derry's residents, institutions and businesses and to comply with Federal and State Regulations. Aging infrastructure and watershed maintenance continue to present challenges to drinking water safety. Education, diligence and continuous maintenance and improvements are necessary to maintain the quality of life we desire for today and for the future.

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 drinking water parameters, and compares them to their respective standards known as Maximum Contaminant Levels (MCLs).

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.

What is the source of my drinking water? The Derry Autumn Woods Community Water System is serviced by 2 groundwater supply bedrock wells located off Applewood Drive, a water storage tank, a booster pump station and over 3,000 feet of ductile iron water lines. Chlorine is injected prior to distribution in order to maintain adequate disinfection. The system provides drinking water to 29 single family homes on Applewood Drive, Buttonwood Drive and English Range Road.

Arsenic Treatment Update: As you' know, arsenic levels in the Autumn Woods water supply averaged around 6 parts per billion which met the EPS's drinking water standards. However, in July 2021 the State of NH lowered the arsenic limit from 10 to 5 parts per billion. To meet this new standard the Town will be installing a new arsenic removal treatment system this summer. This work, which will include new storage tanks, pumps and filter media, is expected to be completed this fall and will lower the arsenic levels to less than 5 parts per billion.

VIOLATIONS IN 2021					
VIOLATION	Date of violation	Explain violation	Length of violation	Action taken to resolve	Health Effects
ARSENIC MCL	11/18/2021	NH DES Issued a Violation to the Town for its Autumn Woods Water System for exceeding the State's new arsenic limit. On 7/1/21 NH lowered the maximum contaminant level (MCL) for arsenic from 0.010 parts per million (ppm) to 0.005 ppm. The annual average arsenic level at Autumn Woods is 0.006 ppm.	9/1/21 to Present	The Town has completed the design of a new arsenic removal treatment system. Construction is expected to begin in August 2022 and be completed by late fall of this year.	(5 ppb through 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.

Town of Derry, NH Autumn Woods Community Water System Sampling Results for 2021

The Table below lists the contaminants detected in Derry's Autumn Woods Community Water System in 2021. In addition to those detected, the Town tests your drinking water for over 100 additional contaminants such as pesticides, herbicides, radionuclides, MTBE etc. using both Town resources and local laboratories.

How to read this table: This table shows the results of our water quality analyses. Every regulated contaminant that we detected in your water, even in the minutest traces, is listed here. The table contains the names of each contaminant, the highest level allowed by State and EPA regulations (MCL), the ideal goals for public health (MCLG), the amount detected, and the most common sources of the contaminant. Footnotes explaining our findings and a key to the units of measure are also included in this table. Definitions of MCL and MCLG are important.

DETECTED WATER QUALITY RESULTS						
CONTAMINANT (Units)	YEAR SAMPLED ¹	HIGHEST LEVEL DETECTED	MCL	MCLG	VIOLATION YES/NO	LIKELY SOURCE OF CONTAMINANT
Arsenic (ppb) ²	2021	RAA = 6.0 RANGE of DETECTED VALUES = 5.5 to 6.1	5.0 (as of July 1, 2021)	0	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2019	0.0081	2	N/A	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine (ppm)	2021	MONTHLY AVERAGE: 0.30 RANGE of DETECTED VALUES = 0.21 to 0.45	MRDL = 4	MRDLG = 4	NO	Water additive used for disinfection; to control microbes
Copper (ppm)	2021	90 th percentile = 0.261 ----- # of samples exceeding AL = 0	AL = 1.3	AL = 1.3	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
DISINFECTION BYPRODUCTS						
Total Trihalomethanes (TTHM) ppb	2021	RAA = 1.5	RAA = 80	N/A	NO	By-product of drinking water chlorination
ADDITIONAL TESTING		RANGE OF DETECTED VALUES		AVERAGE VALUE		WHY DO WE TEST FOR THESE CONTAMINANTS?
Sodium (ppm)	2019	7.54		7.54		The Derry Autumn Woods Community Water System is required by the Safe Drinking water Act (SDWA) to sample its water system for inorganic compounds (IOC's). Derry will sample for these contaminants more frequently as they are in some cases of common interest to consumers.
Calcium (ppm)	2014	50.3		50.3		
Manganese (ppm)	2019	0.013		0.013		
Magnesium (ppm)	2014	3.65		3.65		
Zinc (ppm)	2019	0.0694		0.0694		
Chloride (ppm)	2019	51		51		
Sulfate (ppm)	2019	23		23		
Iron (ppm)	2019	0.19		0.19		
Hardness (calcium)	2014	141		141		
OTHER SUBSTANCES		RANGE DETECTED	AVERAGE VALUE	MCL	MCLG	LIKELY SOURCE OF CONTAMINANT
Perfluorooctanic Acid (PFOA) (ppt) ³	2021	2.06 - 4.25	3.08	12	0	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems

DEFINITIONS

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

BDL: Below Detection Limit	mg/L: milligrams per Liter
NA: Not Applicable	ND: Not Detectable at testing limits
pCi/L: picoCurie per Liter	ug/L: micrograms per Liter
ppb: parts per billion	ppm: parts per million
RAA: Running Annual Average	ppt: parts per trillion

CONTAMINANTS

² **Arsenic:** (2.5 ppb through 5 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. (Above 5 ppb) 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.

³ **Perfluorooctanic Acid (PFOA):** Some people who drink water containing perfluorooctanoic acid (PFOA) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increased risk of getting certain types of cancer. It may also lower a women's chance of getting pregnant.

1. The State of NH and EPA allow for water systems to monitor for contaminants noted less than once per year because the concentrations for these contaminants do not change frequently. Some of this data, though representative, is more than one year old.