

2013 WATER QUALITY REPORT

Town of Derry, NH

Woodlands Community Water System

*Is your water safe to
drink? Absolutely!*



Information about Our Drinking Water Testing in 2012

Prepared by:

The Derry Department of
Public Works

Municipal Water Division

Dear Water Customer,

The Town of Derry is committed to providing water customers with high quality drinking water that meets or exceeds state and federal standards for quality and safety. We are pleased to report the results of our 2012 water testing to inform you about your drinking water.

Each year we report information about your drinking water quality specifically noting the contaminants that were detected in the water which exceeded state or federal water quality standards, their probable source and their potential health effects.

If you have any questions regarding this report or your drinking water in general, please contact the Department of Public Works at the Derry Municipal Center 14 Manning Street Derry, NH in person or call us at 603-432-6147.

Thomas Carrier, Deputy DPW Director

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 at 603-432-6147 or visit our website.

www.derrynh.org

National Drinking water Compliance

This report was prepared using technical guidance provided by the American Water Works Association and the NH Department of Environmental Services and in the strict

Tips to Conserve Water:

- Water in the early morning or evening on your scheduled day. If you sprinkle your lawn under the hot midday sun, you'll lose as much as 30% of your water to evaporation.
- Several short watering sessions are better than a single long one. Lawns can only absorb water so fast. It's better to water your lawn for three ten minute sessions with each session an hour and a half apart than it is to water steadily for 30 minutes and cause run-off.
- Better yet...Xeriscaping. Xeriscaping is water wise landscaping that stresses proper soil preparation, efficient irrigation, and the use of water stingy plants. For homeowners, it means less maintenance, lower water bills and a colorful decorative look. Contact your local greenhouse for more information.

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HEALTH EFFECTS INFORMATION

To ensure tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration regulations establishes 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 contaminants does not necessarily mean that the water poses a health risk. More information about contaminants and their potential health effects can be obtained by calling EPA's safe drinking water hotline at 1-800-426-4791.

The sources of drinking water (both tap 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 radioactive material and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present include:

Microbial Contaminants such as viruses and bacteria which may come from sewage treatment plants, private septic systems, agricultural livestock operations and wildlife.

Inorganic Contaminants such as salt and metals which can be naturally occurring or result from urban stormwater run-off, 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 run-off, and residential uses.

Organic chemicals including synthetic and volatile organics which are byproducts of industrial processes and petroleum production and can also come from gas stations, urban storm-water run-off and septic systems.

Radioactive materials which may be naturally occurring or be the result of oil and gas production and mining activities.

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 other homes in the community as a result of materials used in your homes plumbing. If you are concerned about lead levels in your home's water you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the safe drinking water hotline (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 undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune disorders, some elderly, and infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. EPA/Center for Disease Control guidelines on appropriate means to lessen risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water hotline at 1800-426-4791.

The Derry Woodlands Community Water System is serviced by two groundwater supply bedrock wells located off Lester Lane, a storage tank, a water booster station, and 5,500 feet of plastic water lines. Chlorine is injected prior to distribution in order to maintain adequate disinfection. The system provides drinking water to 60 single family residential homes on Gervaise Dr., Lester Ln., Modean Dr., Long Ave., and Kelley Dr.

Please remember to restrict outdoor watering activities to lawn and gardening on your scheduled even/odd day.
Thanks!

The Table below lists the contaminants detected in the Woodlands Community Water System in 2012. 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 most minute 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

Woodlands Water Quality Summary

2012 WATER QUALITY RESULTS	DETECTED WATER	Sample	MCL or	MCLG or	Range of	Highest		
	QUALITY RESULTS	Year ³	MRDL	MRDLG	Levels	Level	Major Sources of Contamination	Violation Yes or No
	Regulated Contaminants							
	Lead (ppb)	2012	Action Level=15 ¹	0	No Detection to 26	13 ¹ (90th percentile)	Corrosion of household plumbing systems; Erosion of Natural Deposits.	No
	Copper (ppm)	2012	Action Level=1.3 ²	1.3	0.105 to 0.991	0.657 = (90th percentile)	Corrosion of household plumbing systems; Erosion of Natural Deposits; leaching from wood preservatives	No
	Chlorine (ppm)	2012	4.0- MRDL	4.0- MRDL	0.08 to 0.40	0.40	Drinking water disinfection	No
	Barium (ppm)	2012	2	2	0.01	0.01	Discharge of drilling wastes; discharge from metal refineries.	No
	Arsenic (ppb)	2012	0.010	0.010	0.005 to 1.3	1.3	Erosion of natural deposits; stormwater runoff from orchards; runoff from glass and electronics wastes.	Yes
	Fluoride (ppm)	2012	4	4	0.22	0.22	Erosion of natural deposits; Drinking water additive to promote strong teeth; discharge from fertilizer and aluminum factories..	No
	Turbidity (NTU)	2011 ³	TT=<1NTU	N/A	0.7	0.7	Soil Runoff.	No
Volatile Organic Contaminants								
	TTHM's (Total Trihalomethanes) ⁷ (ppb)	2011 ³	80	0	1.1 ⁷	1.7 ⁷	Byproduct of drinking water disinfection	No
Radiological Contaminants								
	Compliance Gross Alpha (pCi/l)	2006 ³	5	0	<2.6 +/- 1.1 to 1.3+/-0.4	1.3 +/- 0.4	Decomposition of Natural deposits	No
	Radium 226 (pCi/l)	2006 ³	5	0	<0.07 +/- 0.3 to 0.2 +/- 0.3 ⁸	0.5 +/- 0.1 ⁸	Decomposition of Natural deposits	No
	Radium 228 (pCi/l)	2006 ³	5	0	<0.5+/-0.2 to 0.9 +/- 0.3 ⁸	1.1 +/- 0.2 ⁸	Decomposition of Natural deposits	No
	Uranium -mass (ppb)	2006 ³	30	0	<0.9 +/- 0.6 to 0.9 +/- 0.5	0.9 +/- 0.5	Decomposition of Natural deposits	No
	Radon Gas (pCi/l)	2006 ³	Not Regulated	Not Regulated	1910 to 2150 ⁴	2150 ⁴	Decomposition of Natural deposits	No
Inorganic Contaminants								
	Chloride (ppm)	2012	Not Regulated	Not Regulated	No Range	65	Road Salt. Seawater trapped in sediments at time of deposition	No
	Iron (ppm)	2012	Not Regulated	Not Regulated	0.077 to 2.03	2.03	Present in most soils and rocks.	No
	Manganese (ppm)	2012	Not Regulated	Not Regulated	0.145 to 5.02	5.02	Naturally present in the environment	No
	Sodium (ppm)	2010 ³	Not regulated	Not Regulated	16.6 to 18	18	Road salt; Seawater trapped in sediments at time of deposition; also may occur in freshwater as a result of exchange of dissolved calcium and magnesium for sodium in aquifer materials.	No
Violations								
	VIOLATIONS	Date	Explanation	Duration	Actions taken to resolve		Health Effects	
	Arsenic MCL	1/1/2012, 4/1/2012, 7/1/2012, 10/1/2012	The Woodlands Back-up well exceed the EPA annual average limit of 0.010 mg/l for arsenic	May 2011 to May 15, 2013	A new Water Treatment system has been installed and is operational. Arsenic levels are now below 0.010 mg/l.		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.	

HEALTH EFFECTS INFORMATION

No Contaminants exceeded the Maximum contaminant level (MCL).

For general health information refer to the back page of this report.

⁷**Total Trihalomethanes (TTHM) and Haloacetic Acids** are byproducts of disinfection process. They are created when chlorine and naturally occurring organic compounds come together. Some of these compounds are known or suspected carcinogens.

⁴**Radon:** A radioactive gas that you cannot see, taste, or smell. It can move 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 carcinogen. Breathing radon can lead to lung cancer. Drinking water containing radon may cause an increased risk of stomach cancer.

GENERAL NOTES

- 1** The maximum allowable limit for lead by EPA as measured in stagnant water is 15 ppb. Results represent 90th percentile.
- 2** The maximum allowable limit for copper by EPA standards in stagnant water is 1.3 ppm. Results represent 90th percentile.
- 3** 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.

KEY TO TABLE

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to MCLG's as feasible using the best available technology.

Maximum Contaminant Level Goal or MCLG: The highest level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow a margin of safety.

MRDLG: Maximum residual disinfection level goal: The level of drinking water disinfection below which there is no known or expected risk to health. The MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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 to control microbial contaminants.

AL: Action level above which a treatment technique must be implemented.

NTU: Nephelometric Turbidity Units

pCi/l: Picocuries per liter (a measure of radioactivity)

ppm: parts per million or milligrams per liter (mg/l)

ppb: parts per billion or micrograms per liter (ug/l)

NR: Not regulated

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

SOURCE WATER ASSESSMENT SUMMARY

DES 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 assessment conducted for the Woodlands wells, prepared in April 2002, received two high and 10 low vulnerability ratings for well 1 and 1 high , 1 medium and 10 low vulnerability ratings for well 2. The complete assessment report for the Autumn Woods water 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/dwqbw/dwspp/dwsap.htm>