Town of Derry, New Hampshire



Derry Municipal Center 14 Manning Street Derry, NH 03038

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Derry on the Web: www.derry-nh.org

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.

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 compliance with consumer confidence reporting guidelines adopted by the US Environmental Protection Agency.

HEALTH EFFECTS INFORMATION

Health Information: To ensure tap water is safe to drink, the EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establishes limits for contaminants in bottled 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 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:

Biological 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 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, 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. Immunocompromised persons such as persons undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune disorders, some elderly, and infants con be particularly at risk for infections. These people should seeks advice about drinking water from their health provider. EPA/Center for Disease Control guidelines on appropriate means to lessen risk of infection by cryptosporidium are available from the Safe Drinking Water hotline at 1800-426-4791.



Town of Derry, New Hampshire

2010 Water Quality Report Meadowbrook Community Water System

What you should know about your drinking water...

Is your drinking water safe to drink? Absolutely!

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 2009 water testing to inform you about your drinking water.

Each year we report information about your drinking water quality specifically noting any contaminants 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 by calling 603-432-6147.

In 2009 the Town attempted to increase the water supply for Meadowbrook by drilling its wells deeper. While initial results show a modest increase in well yields, it also showed elevated levels of arsenic. The Town Council has authorized a joint water system interconnection project with Pennichuck Water Works to bring municipal water out to east Derry to supply Meadowbrook. This project is expected to be completed in 2010. The municipal water system is supplied from Manchester Water Works (MWW) whose source of supply is Lake Massabesic.

MWW employs a state of the art water treatment plant. The water supply is also fluoridated to 1 ppm. The Town will be sending our additional information as the project progresses.

Drinking Water Assessment Reports:

The NH Department of Environmental Services has prepared a source assessment report for wells servicing public water systems in NH. The complete assessment report for the Meadowbrook Community Water System is also available at the Derry Department of Public Works. These assessments note potential sources of contamination in the areas around your system's water sources.

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. Its better to water your lawn for three ten minute sessions-with each session an hour and half apart-than it is to water steadily for 30 minutes and cause run-off.
- Better yet...Xeriscapeth. 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.

The Meadowbrook Community Water System

The Derry Meadowbrook Community Water System is serviced by three groundwater supply bedrock wells located off Adams Pond Rd, a storage tank, a booster pump station, and 7,000 feet of plastic water lines. Chlorine is injected prior to distribution in order to maintain adequate disinfection. The system provides drinking water to 59 single family residential homes on Adams Pond Rd., Meadowbrook Rd., Berge Ln., Coventry Ln., Belmont Ter., and Blake Farm Rd. Please remember to restrict outdoor watering activities to the evening hours on your even or odd scheduled day.



2009

Water

Quality Results

Radiological Contaminants

NR

pCi/l

NR

No Range

Radon Gas

MEADOWBROOK COMMUNITY WATER SYSTEM WATER QUALITY SUMMARY

The Table below lists the contaminants detected in Derry's Meadowbrook Community Water System in 2009. 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.

Re	gulated Contaminant	ts						
					Range of Detected	Highest Detected		
	Contaminant	Unit	MCL	MCLG	Levels	Level	Major Sources	Violation
Inc	rganic Contaminants							
	Lead	ppb	AL=15 ¹	0	<5	<5 ¹ (90th percentile)	Corrosion of household plumbing systems; Erosion of Natural Deposits.	No
	Copper	ppm	$AL=1.3^{2}$	1.3	0.05 to 0.237	0.181^{-2} (90th percentile)	Corrosion of household plumbing systems; Erosion of Natural Deposits; leaching from wood preservatives	No
	Chlorine	ppm	4.0- MRDL	n/a	0.16 to 1.06	1.06	Drinking water disinfection	No
	Fluoride	ppm	4	4	0.29 to 0.31	0.31	Water additive which promotes strong teeth. Erosion of natural deposits	No
	Arsenic	ppm	0.01	0	0.006 to 0.078	0.078^{5}	Erosion of natural deposits. Stormwater runoff from orchards, glass and electronics wastes.	YES
	Turbidity	NTU	TT	N/A	No Range	0.6	Soil Runoff	No
Mí	<mark>crobiological Contamina</mark>							
0	Total Coliform	Р	<5%	0%	0%	0%	Naturally present in the environment	No
<u>Or</u>	ganic Contaminants		00	/	0.04.02	0.2	D. 1 (C1:1: (11 : /:	NI
) _{T.}	Total Trihalomethanes otal Haloacetic Acids (2007) ³	ppb	80	n/a	0.8 to 8.3	8.3 <0.5	Byproduct of drinking water chlorination Byproduct of drinking water disinfection	No No
	MTBE	ppb	60 13	n/a 13	No Range < 0.5 to 0.6	0.6	Gasoline Additive	No No
$\frac{\partial}{\partial R_{a}}$	diological Contaminants	ppb	10	13	< 0.3 to 0.0	0.0	Gasonne Additive	NU
<u> </u>					6.0+/-4.0 to 6.0+/-			
Gro	ss Alpha (compliance) (2008) ³	pCi/l	15	15	4.6 0.9+/-0.1 to 1.6+/-	6.0+/-4.6	Decay of natural and manmade deposits	No
Ct.	Radium 226 ⁶ (2008) ³	pCi/l	5	0	0.2 1.4+/-0.2 to 1.6+/-	1.6+/-0.2	Decay of natural and manmade deposits	No
· •	Radium 228 ⁶ (2008) ³	pCi/l	5	0	0.2	1.6+/-0.2	Decay of natural and manmade deposits	No
	Uranium $(2008)^3$	pCi/l	20	0	0.5+/-0.3	0.5+/-0.3	Decay of natural and manmade deposits	No
r Un	regulated Contamina	ants						
Inc	rganic Contaminants							
	Chloride	ppm	NR	NR	28 to 34	34	Road Salt. Seawater trapped in sediments at time of deposition	No
	Calcium	ppm	NR	NR	45.2 to 50.1	50.1	Soils and Rocks containing limestone, dolomite and gypsum. Small amounts from igneous and metamorphic rocks.	No
	Sodium	ppm	NR	NR	13.4 to 15.1	15.1	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
	Iron	ppm	NR	NR	0.039 to 0.343	0.343	Present in most soils and rocks.	No
	Manganese	ppm	NR	NR	0.045 to 0.06	0.06	Naturally present in the environment	No
	Magnesium	ppm	NR	NR	6.0 to 7.0	7.0	Naturally present in the environment	No
	Sulfate	ppm	NR	NR	23 to 29.3	29.3	Naturally Present in the environment	No
	Sulfide	ppm	NR	NR	0.2 to 0.6	0.6	Naturally Present in the environment	No

 825^{4}

Decomposition of Natural deposits

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 eafety.

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/I: Picocuries per liter (a measure of radioactivity)

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

NR: Not regulated

GENERAL NOTES

- 1 The maximum allowable limit for lead by EPA Standards 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 does not change frequently. Some of this data, though representative, is more than one year old.

HEALTH EFFECTS INFORMATION

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

⁴Radon Gas: Presently the US Environmental Protection Agency is determining a standard for radon gas which is inhaled and has been linked to cancer. However, it is not clear at what level in your drinking water contributes to this health effect.

⁵Arsenic: The US Environmental Protection Agency has set an MCL of 10 ppb effective January of 2006. USEPA's current standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. USEPA 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. Some people who drink water containing arsenic in excess of the MCL (0.010 mg/l) over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

⁶ Combined Radium (pCi/L): Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

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.

No