

Town of Derry, NH

Municipal Core 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 any contaminants detected in the water which exceeded state or federal water quality standards, their probable source, and their potential health effects.

For your information we have also made available a copy of the Manchester Water Works Water Quality Report which features information on Lake Massabesic water quality and the Manchester Water Works Treatment Plant which provides water to the Derry Core Water System.

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**.

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

The Derry Municipal Core Water System is serviced by Manchester Water Works which supplies treated water from Lake Massabesic located in Manchester and Auburn. Water is stored in a 4 million gallon atmospheric storage tank. Most of Derry's water system is gravity, however there are four water booster stations which service areas of Derry at higher elevations. Derry services approximately 17,000 customers in Derry including 800 Pennichuck Water Works customers. Derry services parts of Londonderry and Windham as well. As a Derry water customer, you are also an indirect water customer of Manchester Water Works.

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 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 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 home's 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.

IMPORTANT REMINDER ABOUT CHLORAMINES

Manchester Water Works, Derry water supplier, uses chloramines to treat the water supply for disinfection. Chloramines make water safer and better tasting. Chloraminated tap water, which has been used in the U.S. for decades is safe for drinking, cooking, bathing and other daily uses. However, some customers will need to take special precautions.

FISH OWNERS Like chlorine, chloraminated water may cause both fresh and saltwater fish and other aquatic life to die, because water is taken directly into their bloodstream. Recommended precautions include: Treat chloraminated water **BEFORE** it is added to your tank, aquarium, pond or bowl. Carbon filters do not remove chloramines. Customers who use tap water for aquaculture (growing plants in a water tank or pond) are encouraged to get expert advice regarding whether and how to neutralize or remove chloramines. Restaurants and grocery stores with lobster tanks should take special precautions to treat the water. Chloraminating products and equipment for chlorine and ammonia removal can be found at most pet and aquarium retailers.

KIDNEY DIALYSIS PATIENTS Chloramines are harmful when they go directly into the bloodstream, just as chlorine in water would be toxic. They must be removed from water used in either hospital or home dialysis machines. Medical centers that perform dialysis are responsible for the removal of chloramines from water that enters the machines. Any dialysis equipment connected to the Derry water supply will require modifications to eliminate chloramines. Dialysis patients and people with questions or concerns should contact their physician or public health professional.

HOUSEHOLD CONCERNS Chloramines may cause some rubber or synthetic rubber materials in plumbing fixtures to degrade faster than normal. When replacing, ask for chloramines resistant parts at plumbing suppliers and hardware stores. Chloramines may also impact **BREWERIES AND BAKERIES** as yeast and enzymes may not survive.

Municipal System Water Quality Summary

The Table below lists the contaminants detected in Derry's Municipal Core Water System in **2012**. In Addition to those detected the Town and Manchester Water Works 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

DETECTED WATER QUALITY RESULTS	Sample Year ³	MCL or MRDL	MCLG MRDLG	Range of Detected Levels	Highest Detected Level	Major Sources of Contamination	Violation Yes or No
Lead (ppb)	2011	Action Level=15 ¹	0	No Detection to 39	0 ¹ (90th percentile)	Corrosion of household plumbing systems; Erosion of Natural Deposits.	No
Copper (ppm)	2011	Action Level=1.3 ²	1.3	No Detection to 0.250	0.08 ² = (90th percentile)	Corrosion of household plumbing systems; Erosion of Natural Deposits; leaching from wood preservatives	No
Chlorine (ppm)	2012	4.0	4.0	0.01 to 1.9	1.9	Drinking water disinfection	No
Fluoride (ppm)	2012	4	4	0.45	0.45	Erosion of natural deposits; Drinking water additive to promote strong teeth; discharge from fertilizer and aluminum	No
Barium (ppm)	2012	2	2	<0.01 to 0.011	0.011	Discharge of drilling wastes; discharge from metal refineries;	No
Volatile Organic Contaminants							
TTHM's (Total Trihalomethanes) ⁴ (ppb)	2012	80	N/A	1.0 to 4.0	4.0	Byproduct of drinking water disinfection	No
Haloacetic Acids (HHA) ⁴ (ppb)	2012	60	N/A	1.0 to 9.5	9.5	Byproduct of drinking water disinfection	No
Additional Testing							
Chloride (ppm)	2012	Not Regulated	Not Regulated	36	36	Road Salt. Seawater trapped in sediments at time of deposition	No
Iron (ppm)	2012	Not Regulated	Not Regulated	<0.01 to 0.123	0.123	Present in most soils and rocks.	No
Zinc (ppm)	2012	Not Regulated	Not Regulated	0.064	0.064	Naturally present in the environment	No
Manganese (ppm)	2012	Not Regulated	Not Regulated	0.013 to 0.023	0.023	Naturally present in the environment	No

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.

HEALTH EFFECTS INFORMATION

No Contaminants exceeded the Maximum contaminant level (MCL).
For general health information refer to the back page of this report.

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.

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 Lake Massabesic, Derry's water supply source, prepared in September 2002, received four high and four medium vulnerability ratings, while it ranked at low vulnerability for five additional categories. The complete assessment report for the Derry Core 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/dwgb/dwspp/dwsap.htm>

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.