Dear Water Customer,

ter testing to inform you about your drinking eral standards for quality and safety. We are pleased to report the results of our 2010 wawater that meets or exceeds state and fed-The Town of Derry is committed to providing with high quality drinking

tential health effects exceeded state or federal water quality standrinking water quality specifically noting any contaminants detected in the water which their probable source, and their poreport information about your

which provides water to the Derry Core Waon Lake Massabesic water quality and the Manchester Water Works Treatment Plant ter Quality Report which features information a copy of the Manchester Water Works Wa-For your information we have also enclosed

extended water into east Derry adding over 600 new water customers to our Core Sys-In 2010 Derry and Pennichuck Water Works This will allow the Town to stabilize its structure into the future.

Municipal Center, please contact the Department of Public Works at the Derry drinking garding this If you have any questions water report Ξ, 14 Manning general, Q your

Street, Derry, NH in person or by calling **603-432-6147**.

The Derry Department of Public Works Municipal Water Division

Prepared by:

in 2010





Is your water safe to drink? Alesalutely!

Municipal Core Water System

Foun of Dony, NH

QUALITY REPORT 2011 WATER

HEALTH EFFECTS INFORMATION

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

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts risk. More information about contaminants and their potential health effects can be obtained by calling EPA's contaminants. The presence of contaminants does not necessarily mean that the water poses a health

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 anisafe drinking water hotline at 1-800-426-4791.

private septic systems, agricultural livestock operations and wildlife. Biological Contaminants such as viruses and bacteria which may come from sewage treatment plants mals or from human activity. Contaminants that may be present include:

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,

Organic chemicals including synthetic and residential uses and volatile organics which are byproducts of industrial

septic systems esses and petroleum production and can also come from gas stations, urban storm-water run-off and

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

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 ter. Additional information is available from the safe drinking water hotline (1-800-426-4791) you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap wa-Lead—Infants and young children are typically more vulnerable to lead in drinking water than the general

ders, 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. Do I need to take special precautions? Some people may be more vulnerable to contaminants motherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune drinking water than the general population. Immunocompromised persons such as persons undergoing che-

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 ing suppliers and hardware stores. Chloramines may also impact **BREWERIES AND BAKERIES** as yeast and enzymes may not survive.

sis 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 profes-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 dialysional.

clude: 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 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 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.

aminated tap water, which has been used in the for decades is safe for drinking, cooking, bathing uses. However, some customers will need to take special precautions and other daily

Manchester Water Works, Derry water supplier, uses chloramines to treat the water supply for disinfection. Chloramines make water safer and better tasting.

IMPORTANT REMINDER ABOUT CHLORAMINES

Association and the NH Department of Environmental Services and in the strict compliance with This report was prepared using technical guidance provided by the American Water Works consumer confidence reporting guidelines adopted by the US Environmental Protection Agency.

National Drinking water Compliance

Phone: 603-432-6147 Fax: 603-432-6130

Derry Municipal Water Division Department of Public Works
Derry Municipal Center 14 Manning Street Derry, NH 03038 Town of Derry, NH

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

How can I get involved?

gallons per day. Derry's average water usage for 2010 was 1.3 millic That's a 100,000 gallon per day increase from 2009.

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 area 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. am as Derry services parts of Londonderry and Wind water customer, you are also an indirect water Water Works.

Municipal System Water Quality Summary

The Table below lists the contaminants detected in Derry's Municipal Core Water System in 2010. 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

Contaminant	Sample Year ³	MCL	MCLG	Range of Detected Levels	Highest Detected Level	Major Sources of Contamination	Violation Yes or No
norganic Contaminants	<u> </u>						
Lead (ppb)	2008	Action Level=15 ¹	0	No Detection to 5	5 ¹ (90th percentile)	Corrosion of household plumbing systems; Erosion of Natural Deposits.	No
Copper (ppm)	2008	Action Level=1.3 ²	1.3	0.013 to 0.201	$0.074^2 =$ (90th percentile)	Corrosion of household plumbing systems; Erosion of Natural Deposits; leaching from wood preservatives	No
Chlorine (ppm)	2010	4.0- MRDL	4.0- MRDL	0.06 to 1.68	1.68	Drinking water disinfection	No
Barium (ppm)	2010	2	2	<0.01 to 0.013	0.013	Discharge of drilling wastes; Discharge from metal refineries; Erosion from natural deposits	No
Fluoride (ppm)	2010	4	4	0.98 to 0.99	0.99	Erosion of natural depostis; Drining water additive to promote strong teeth.	No
/olatile Organic Contaminants							
TTHM's (Total Trihalomethanes) ⁷ (ppb)	2010	80	N/A	0.6 to 4.7	4.7	Byproduct of drinking water disinfection	No
Haloacetic Acids (HHA) (ppb)	2010	60	N/A	1.6 to 5.8	5.8	Byproduct of drinking water disinfection	No
norganic Contaminants	D. C. 1804						
Chloride (ppm)	2010	Not Regulated	Not Regulated	29 to 30	30	Road Salt. Seawater trapped in sediments at time of deposition	No
Sodium (ppm)	2010	Not Regulated	Not Regulated	32.1 to 32.8	32.8	Road Salt. Seawater trapped in sediments at time of deposition. Also may occur in freshwater as a result of exchange of dissolved calcium	No
Calcium (ppm)	2010	Not Regulated	Not Regulated	3.6 to 3.9	3.9	Soils and Rocks containing limestones, dolomite and gypsom. Small amounts from igneous and metamorphic rocks.	
Iron (ppm)	2010	Not Regulated	Not Regulated	<0.01 to 0.045	0.045	Present in most soils and rocks.	No
Sulfate (ppm)	2010	Not Regulated	Not Regulated	16 to 17	17	Naturally present in the environment	No
Zinc (ppm)	2010	Not Regulated	Not Regulated	0.037 to 0.103	0.103	Naturally present in the environment	No
Mangenese (ppm)	2010	Not Regulated	Not Regulated	0.018 to 0.042	0.042	Naturally present in the environment	No
Hardness (ppm CaCO3/L)	2010	Not Regulated	Not Regulated	9 to 9.7	9.7	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/I: 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

SOURCE WATER ASSESSMENT SUMMARY

Source Information			Summary of Susceptibility Factors			
Secondarion of the sec	THE STATE OF THE S	Low	Med	High		
		4	4	5		
Source Name and Description	Manchester Water Works: 001 Lake Massabesic/Raw					

Souce 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 developemnt and implement source water protection programs. 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/reports/documents/derry.pdf

HEALTH EFFECTS INFORMATION

No Contaminants exceeded the Maximum contaminant level (MCL).

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

⁷Total 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.

FLUORIDE ADDITIVE REDUCTION

Changes to Fluoride levels The US Health & Human Services (HHS) and US Environmental Protection Agency (EPA) recently issued a joint notice of their intent to revise the recommended fluoride levels for community water systems from the current level at 1 mg/l to a new level of 0.7 mg/l. As a result, and in consultation with Manchester Health Department and the NH Department of Environmental Services, Manchester Water Works will be reducing fluoride levels on Monday February 7. The new level will be 0.7 mg/l. Should you be interested in finding out more about this change, we encourage you to check out the HHS link indicated below.

http://www.hhs.gov/news/press/2011pres/01/pre_pub_frn_fluoride.html

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 a half apart-than it is to water
 steadily for 30 minutes and cause run-off.
- Better yet...Xeriscape^{III}. 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.