Dear Water Custamer,

ter testing to inform you about your drinking al standards for quality and safety. We are pleased to report the results of our 2011 wawater that meets or exceeds state and feder-The Town of Derry is committed to providing water customers with high quality drinking

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

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

please Manning Street, Derry, NH in person or by report calling 603-432-6147. 으 at have contact the your the Derry Municipal Center, any drinking water questions Department regarding 5 으 general, Public nter, 14 this



Town of Derry
Water Storage
Tank hold 4
million gallons
of drinking
water

Municipal Water Division

The Derry Department of Public Works

Drinking Water Testing Prepared by: in 2011





drink? Absolutely!

Municipal Core Water System



chloramines. Restaurants and grocery stores with lobster tanks should take special precautions to treat

removal can be found at

and

the water. Chloraminating products for chlorine and ammonia removal or

chlorine and ammonia

most pet and aquarium retailers.

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

Is your water safe to

Sown of Devry , $N\mathcal{H}$

QUALITY REPORT 2012 WATER

HEALTH EFFECTS INFORMATION

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

some contaminants. The presence of contaminants does not necessarily mean that the water poses a health Drinking water, including nants in bottled water bottled water, may reasonably be expected to contain at least small amounts 으

springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally safe drinking water hotline at 1-800-426-4791 risk. More information about contaminants and their potential health effects can be obtained by calling EPA's sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs

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

occurring minerals and radioactive material and can pick up substances resulting from the presence mals or from human activity. Contaminants that may be present include:

of ani-

run-off, industrial or domestic wastewater discharges, oil and gas production, mining or farming Inorganic Contaminants such as salt and metals which can be naturally occurring or result from urban

and residential uses Pesticides and herbicides which may come from a variety of sources such as agriculture, storm-water run-off,

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

mining activities 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 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 Additional information is available from the safe drinking water hotline (1-800-426-4791)

disorders, some elderly, and infants can 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 chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune drinking water than the 1800-426-4791. I need to take special precautions? Some people may be more vulnerable to contaminants in han the general population. Immunocompromised persons such as persons undergoing

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. guidance provided by the American Water Works This report was prepared using technical

some rubber or synthetic rubber materials in plumbing fixtures to degrade faster than normal. When replacing, ask for chloramines resistant parts at plumb-

Chloramines

Chloramines may

ing suppliers and hardware stores.

and enzymes may not survive.

National Drinking water Compliance

sional.

603-432-6130

Phone: 603-432-6147

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-

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

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 dialy-

responsible for the removal of

are

sis

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 Manchester Water Works, Derry water

ABOUT

REMINDER

IMPORTANT

How can I get involved?

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

need to take special precautions.

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.

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. 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.

Municipal System Water Quality Summary

The Table below lists the contaminants detected in Derry's Municipal Core Water System in 2011. 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

		Sample	MCL or	MCLG	Range of Detected	Highest Detected		Violation
	Contaminant	Year ³	MRDL	MRDLG	Levels	Level	Major Sources of Contamination	Yes or No
	Inorganic Contaminants							
	Lead (ppb)	2011	Action Level=15 ¹		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)	2011	4.0- MRDL	4.0-	0.09 to 2.20	2.2	Drinking water disinfection	No
	Fluoride (ppm)	2011	4	4	0.062 to 0.068	0.068	Erosion of natural depostis; Drining water additive to promote strong teeth.	No
2011	Volatile Organic Contaminants							
WAT	TTHM's (Total Trihalomethanes) ⁴	2011	80	N/A	1.4 to 1.6	1.6	Byproduct of drinking water disinfection	No
ER QU	Haloacetic Acids (HHA) (ppb)	2011	60	N/A	1.3 to 8.9	5.8	Byproduct of drinking water disinfection	No
ALITY	Inorganic Contaminants							
2011 WATER QUALITY RESULTS	Chloride (ppm)	2011	Not Regu- lated	Not Regu- lated	34	34	Road Salt. Seawater trapped in sediments at time of deposition	No
ILTS	Sodium (ppm)	2011	Not Regu- lated	Not Regu- lated	39.2 to 39.9	39.9	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
	Calcium (ppm)	2011	Not Regu- lated	Not Regu- lated	4.4 to 4.5	4.5	Soils and Rocks containing limestones, dolomite and gypsom. Small amounts from igneous and metamorphic rocks.	No
	Iron (ppm)	2011	Not Regu- lated	Not Regu- lated	<0.01 to 0.08	0.08	Present in most soils and rocks.	No
	Sulfate (ppm)	2011	Not Regu- lated	Not Regu- lated	21 to 22	22	Naturally present in the environment	No
	Zinc (ppm)	2011	Not Regu- lated	Not Regu- lated	0.032 to 0.086	0.086	Naturally present in the environment	No
	Mangenese (ppm)	2011	Not Regu- lated	Not Regu- lated	0.01	0.01	Naturally present in the environment	No
	Hardness (ppm CaCO3/L)	2011	Not Regu- lated	Not Regu- lated	11 to 11.2	11.2	Naturally present in the environment	No

HEALTH EFFECTS INFORMATION

No Contaminants exceeded the Maximum contaminant level (MCL).

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

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

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

SOURCE WATER ASSESSMENT SUMMARY

Sourc	Summary of Susceptibility Factors				
		Low Med High			
Source Name and Description	Manchester Water Works: 001 Lake Massabesic/Raw	4	4	5	

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 Rand Shepard Hill 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

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[®]. 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.

⁴Total 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.