*Town of Derry, New Hampshire*

**Derry Municipal Center**
**14 Manning Street**
**Derry, NH 03038**

**Phone: 603-432-6147**
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***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**

# 2008 Water Quality Report
# Derry Municipal 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 2006 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.**

**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 a hour 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.*

### Chloramine Disinfection:

Chloramine is a disinfectant used to protect water systems against microbial growth in the distribution system. It combines chlorine and ammonia. Manchester Water Works, Derry's water supplier, changed from chlorine to chloramines in 2007. The primary reason for the change was to reduce the formation of disinfection byproducts which form when organic matter comes in contact with chlorine, namely trihalomethanes (THM's). THM's at high levels over long periods of time potentially increase risks of cancer. Since the conversion to chloramines we have reported significant reductions in TTHM's far below EPA maximum contaminant levels. Customers are still reminded that, although chloramines will not affect daily water uses, chloramines can kill both salt and fresh water aquarium fish, including lobsters and clams and other aquatic life unless the water is properly treated. Also kidney dialysis patients need to take special precautions with chloriminated water.

## The Derry Municipal Core Water System

**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 five water booster stations which service areas of Derry at higher elevations. Derry services approximately 17,000 customers in Derry as well as parts of Londonderry and Windham. As a Derry water customer, you are also an indirect water customer of Manchester Water Works. We therefore are providing to you copies of Manchester Water Works' Consumer Confidence Report. The water quality information provided in Derry's report is in addition to the information provided by Manchester Water Works and collectively represent the quality of your drinking water.**

# TOWN OF DERRY MUNICIPAL CORE WATER SYSTEM
# WATER QUALITY SUMMARY

**The Table** below lists the contaminants detected in Derry's Municipal Core Water System in 2007. 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.

## Regulated Contaminants

| Contaminant | Unit | MCL | MCLG | Range of Avg. Detected Levels | Highest Detected Level | Major Sources | Violation |
|---|---|---|---|---|---|---|---|
| *Inorganic Contaminants* | | | | | | | |
| Lead (2005)[3] | ppb | AL=15 [1] | 0 | <0.005 to 0.007 | 0.005 [1] | Corrosion of household plumbing systems; Erosion of Natural Deposits. | No |
| Copper (2005)[3] | ppm | AL=1.3 [2] | 1.3 | <0.01 to 0.209 | 0.089 [2] | Corrosion of household plumbing systems; Erosion of Natural Deposits; leaching from wood preservatives | No |
| Chlorine | ppm | 4.0- MRDL | n/a | 0.46 to 1.03 | 1.03 | Drinking water disinfection | No |
| Fluoride | ppm | 4 | 4 | 1.03 to 1.07 | 1.07 | Water additive which promotes strong teeth. Erosion of natural deposits | No |
| *Microbiological Contaminants* | | | | | | | |
| Total Coliform | P | <5% | 0% | 0% | 0% | Naturally present in the environment | No |
| *Volatile Organic Contaminants* | | | | | | | |
| TTHM's (Total Trihalomethanes) | ppb | 80 | n/a | 0.5 to 6.7 | 6.7 | Byproduct of drinking water chlorination | No |
| Total Haloacetic Acids | ppb | 60 | n/a | 4.5 to 9.8 | 9.8 | Byproduct of drinking water disinfection | No |

## Unregulated Contaminants

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Inorganic Contaminants* | | | | | | | |
| Chloride | ppm | NR | NR | 21 to 22 | 22 | Road Salt. Seawater trapped in sediments at time of deposition | No |
| Calcium | ppm | NR | NR | 3.3 | 3.3 | Soils and Rocks containing limestone, dolomite and gypsum. Small amounts from igneous and metamorphic rocks. | No |
| Sodium | ppm | NR | NR | 26.8 to 27.4 | 27.4 | 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 |
| Zinc | ppm | NR | NR | 0.486 to 0.487 | 0.487 | Naturally present in the environment | No |
| Magnesium | ppm | NR | NR | <1 | <1 | Naturally present in the environment | No |
| Iron | ppm | NR | NR | 0.026 to 0.041 | 0.041 | Present in most soils and rocks | No |
| Manganese | ppm | NR | NR | 0.032 to 0.034 | 0.032 | Naturally present in the environment | No |
| Sulfate | ppm | NR | NR | 18.8 to 19.5 | 19.5 | Naturally present in the environment | No |

2007 Water Quality Results

## 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

## 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 by-products of disinfection process. They are created when chlorine and naturally occurring organic compounds come together. Some of these compounds are known or suspected carcinogens.

## 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 do not change frequently. Some of this data, though representative, is more than one year old.