



# WATER QUALITY REPORT 2006



## City of Dover Community Services Department Dover, New Hampshire

*A utility crew of nineteen employees operates and maintains:*

- ~ Seven full-scale production wells ~ Two water treatment facilities ~ An elevated tank reservoir ~*
- ~7300 water services ~ ~ Approximately 135 miles of pipe ~*

*Dover water utility employees are committed to producing quality water - water that meets or exceeds standards on quality and safety, set by state and federal regulatory agencies.*

*The result is clean, clear, quality water for our consumer.*

*Water For Life...*

# TEST RESULTS

Contaminant	Violation	Level Detected / Range of Detection	Measurement Unit	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>						
Arsenic *2004 data	NO	* <1 – 2.1 See notes	Parts per billion	0	10	Erosion of natural deposits Runoff from orchards or from glass and electronic production waste
Barium *2004 data	NO	* <.008 – .0138 average .01 ppm	Parts per million	2	2	Erosion of natural deposits Discharge of drilling wastes Discharge from metal refineries
Beryllium *2004 data	NO	* <.77 – 1.0 average .89 ppb	Parts per billion	4	4	Discharge from metal refineries and coal burning factories Discharge from electrical, aerospace and defense industries
Copper	NO	.276 @ 90 <sup>th</sup> percentile See notes	Parts per million	1.3	AL=1.3	Corrosion of household plumbing systems Erosion of natural deposits Leaching from wood preservatives
Fluoride	NO	* .8 – 1.0 average .89 ppm	Parts per million	4	4 * Added to promote strong teeth	Erosion of natural deposits Water additive which promotes strong teeth Discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	NO	.21 - .88	Parts per million	10	10	Runoff from fertilizer use Leaching from septic tanks, sewage Erosion of natural deposits
<b>Volatile Organic Compounds</b>						
MtBE	NO	BDL – .9	Parts per billion	0	13 State level	Synthetically produced liquid added to gas Leakage from underground storage tanks
TTHM Total Trihalomethanes	NO	2.5 - 16	Parts per billion	N/A	80	Byproduct of drinking water chlorination

## Definitions:

- ◆ **MCLG:** Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- ◆ **MCLs:** The highest level of a contaminant in drinking water below, which there is no known or expected risk to health. They are set as close to the MCLGs as feasible using the best available treatment technology
- ◆ **AL:** Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- ◆ **TT:** Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.
- ◆ **pCi/L:** Picocuries per liter is a measurement of radioactivity in water. A picocurie is 10<sup>-12</sup> curies and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.

**Methyl tertiary-butyl ether (MtBE)** is a colorless, synthetically produced liquid added to gasoline to increase octane and help it burn cleaner. Found in many ponds, lakes and wells in New Hampshire, MtBE has been the focus of much media attention recently. The City of Dover is included in the list of community wells showing very low levels of MtBE. The Lowell Avenue treatment plant removes this contaminant through an aeration process. Legislators are being urged to substantially cut the use of MtBE and improve source protection programs on state and federal levels.

## HEALTH EFFECTS INFORMATION

**IN THE EVENT CONTAMINANTS EXCEEDED THE MAXIMUM CONTAMINANT LEVELS, PERTINENT HEALTH EFFECTS INFORMATION WOULD BE PROVIDED**

### SOURCE WATER ASSESSMENT REPORT

The NH Department of Environmental Services has prepared a Source Assessment Report for the source(s) serving this community water system, assessing the sources' vulnerability to contamination. The results of the assessment, prepared on January 7, 2003, are as follows:

Source Information	Summary of Susceptibility Ratings		
	High	Med	Low
GPW 1 Calderwood / Hoppers	1	3	8
GPW Cummings	3	5	4
GPW Hughes Well	2	3	7
GPW Ireland Well	2	6	4
GPW Campbell / Hoppers	1	3	8
GPW Smith Well	3	4	5
GPW Griffin Well	3	5	4

The complete Source Assessment Report is available for inspection at the Pierre Bouchard Public Works Facility located at 271 Mast Rd, Dover, NH. For more information, call Community Services at 516-6450 or visit NH DES' Drinking Water Source Assessment Program web site at [www.des.state.nh.us/dwspp](http://www.des.state.nh.us/dwspp).



### Water Treatment Techniques

**Iron & Manganese Removal** is conducted at two treatment plants using green sand filtration. This is a process where the water is filtered through tanks filled with the medium, in this case green sand, which removes the iron and manganese.

**Volatile Organic Compounds** are removed via air stripping. Air is forced through the water at the plants, which allows the VOC's to be removed.

## ~ FREQUENTLY ASKED QUESTIONS ~

### ***What is the source of my water?***

Dover residents drink groundwater pumped from seven wells located throughout the City. These wells provide access to four underground aquifers of high quality water to supply our multifaceted needs.

### ***Why are there contaminants in my 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 indicate that water poses a health risk. Some contaminants are naturally present in the environment, some are due to the erosion of natural deposits, and some are attributable to the corrosion of plumbing systems. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

### ***How can I get involved?***

Direct inquiries about public participation and policy decisions to the Community Services Department Utilities Division at 516-6072. Currently, the Dover Utilities Commission meets in the Pierre B. Bouchard Public Works Facility, located at 271 Mast Road; on the third Monday of each month at 4:15 p.m. Meetings are open to the public.

### ***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 with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from the health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

*Other tests are conducted but the report includes only those contaminants detected. Interested persons may view the Water Quality Report 2006 on line at <http://www.ci.dover.nh.us>. Source Water Assessments are available in the Planning Office at City Hall.*



Have other questions? We have answers.

Water quality questions? Contact Richard Fowler, Chief Operator, 516-6510.

Water meter questions? Contact Sharon Lucey, Meters & Backflow Coordinator, 516-6461

Water distribution questions? Contact Bill Boulanger, Utilities Supervisor, 516-6459

Environmental impact questions? Contact Dean Peschel, Environmental Programs, 516-6094

Other questions? Contact Water & Sewer Billing, 516-6028 or 516-6029

*Please... don't hesitate to call.*

