

## DELAWARE CITY WATER QUALITY REPORT

We are very pleased to provide you with this annual water quality report for 2003. We're also pleased to report that Delaware City drinking water meets or exceeds all the standards for reportable substances. You will see that substances such as iron, chloride, and sodium are commonly found in drinking water. They occur naturally and, at trace levels, are not harmful to drink. The report shows at what levels these substances were found during tests conducted from Jan. 1, 2003-Dec. 31, 2003, unless otherwise specified. If you have any questions about this report and the quality of your water, please contact Paul Morrill, City Manager at (302) 834-4573. If you wish to learn more, please attend any of the regularly scheduled meetings of Mayor & Council held the third Monday of each month at 7:30 p.m. in the Town Hall.

The water serving your home comes from the Potomac aquifer via 2 wells at depths of 720 and 737 feet. This aquifer is confined and protected from the influence of past farming activities and saltwater intrusion. DNREC's source water assessment plan is currently under review by the EPA. Copies can be obtained by calling DNREC at (302) 739-6330.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791. 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 their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline mentioned above.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations established limits for contaminants in bottle water, which must provide the same protection for public health.

In the table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

**90<sup>th</sup> PERCENTILE** - A calculation based upon averaging the 4<sup>th</sup> and 5<sup>th</sup> highest lead/copper readings, used to determine compliance with the Lead and Copper Rule.

**ACTION LEVEL** - The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.

**MAXIMUM CONTAMINANT LEVEL** - the "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MAXIMUM CONTAMINANT LEVEL GOAL** - the "Goal" (MCLG) is 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.

**MAXIMUM DISINFECTION RESIDUAL LEVEL (MRDL)** - the highest level of a disinfectant in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.

**MAXIMUM DISINFECTION RESIDUAL LEVEL GOAL (MRDLG)** - the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NON-DETECTS (ND)** - laboratory analysis indicates that the constituent is not present.

**NOT REGULATED (N/R)** - no MCL identified because this substances is unregulated.

**PARTS PER MILLION (PPM)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.

**PICOCURIES PER LITER (pCi/l)** - a measure of radioactivity in water.

Parameter	Unit of Measure	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Level Detected	Annual Range	Major Sources
<b>Regulated Contaminants</b>						
Chloride	ppm	4	0.8	0.22	0.21 - 0.22	Naturally occurring in soil
Radionuclides (Radiological), 2000 Data	pCi/l	15	0	0.06		Erosion of natural deposits
Acetic Acids, total	ppb	60	0	2.2		Disinfection by-product
Chlorine, Free Residual	ppm	4	4 (MRDLG)	2.2	nd - 2.2	Disinfectant used in drinking water industry
Halomethanes, total	ppb	80	0	27.4		By-product of drinking water chlorination
<b>Unregulated Contaminants</b>						
Ammonia, Total	ppm	n/r	0	90	85 - 90	By-product of disinfection
Monochloromethane	ppb	n/r	0	4.5		By-product of disinfection
Dibromomethane	ppb	n/r	0	0.7		
Trihalomethanes, total	ppm	250	250	13.7		
Chlorine, Free Residual	ppm	4	4	19		By-product of disinfection
Bromine, Free Residual	ppb	n/r	0	4.5		By-product of disinfection
Monochloromethane	ppb	n/r	0	6		
Dibromomethane	ppm	n/r	300	0.17	0.13 - 0.17	
Trihalomethanes, Total	ppb	300	7.3	8.2	6.2 - 8.2	
Field Capacity	0-14 scale	n/r	50	47		
Lead	ppm	n/r	50	150	117 - 150	
Copper	ppm	500	500			
<b>Lead &amp; Copper</b>						
Percentile Lead (2002 Data)	ppb	15	0	3	nd - 4	Corrosion of household plumbing systems, Erosion of natural deposits
Number of Sites Exceeding Lead Action Level				0		
Percentile Copper (2002 Data)	ppb	1,300	0	1070	21 - 2240	Corrosion of household plumbing systems, Erosion of natural deposits
Number of Sites Exceeding Copper Action Level				2 (see note 1)		
<b>Microbiological Contaminants</b>						
Total Coliform						

Absent results in 100 % of samples collected

Note 1: Although 2 homes exceeded the copper action level of 1300 ppb during the last sampling period, Delaware City Water System as a whole is in compliance with the Lead and Copper Rule.