



CITY NEWS

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June 19, 2009

DELAWARE CITY WATER QUALITY REPORT 407 Clinton Street, Delaware City, DE 19706 PWSID – DE0000566 Report Written April, 2009

We are very pleased to provide you with this annual water quality report for 2008. 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 any substances were found during tests conducted from Jan. 1, 2008 - Dec. 31, 2008, unless otherwise specified. If you have any questions about this report and the quality of your water, please contact Dan Tjaden, 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, located at the address above.

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. The Division of Public Health in conjunction with the Department of Natural Resources and Environmental Control has conducted source water assessments for nearly all community water systems in the state. For a copy of the assessment, contact Dan Tjaden at the Delaware City Town Hall (302) 834-4573.

All sources of drinking water (whether a river, lake, spring, well, or pond) are subject to potential contamination by substances that are naturally occurring or man made. As water travels through the ground or over the surface of the land, it can dissolve naturally occurring substances, including radioactive substances. Additionally, some substances result from the presence of animals or human activity. These substances (both natural and man-made) can be microbes, inorganic or organic chemicals, pesticides/herbicides 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

Hydrant Flushing June 24th & 25th

Water in the system remains treated during the flushing and slightly discolored water is still safe to consume. However, it is recommended that customers open their COLD water taps until the water runs clear. Avoid turning on hot water taps until the water runs clear to prevent discolored water from getting into the hot water heater.

The hydrant flushing program is performed every year and helps keep the distribution system clear of mineral deposits. It also allows all fire hydrants to be tested and repaired if necessary. The flushing will be performed by employees of Artesian Water Company on behalf of the City.

If you encounter some staining of laundry, stain remover powder is available at Town Hall that may be able to help.

Parameter	Unit of Measure	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Level Detected	Annual Range	Major Sources
Inorganic Contaminants						
Barium (2006 Data)	ppb	2000	2000	22	21 - 22	Erosion of natural deposits.
Chromium (2006 Data)	ppb	100	100	1.2	1.1 - 1.2	Erosion of natural deposits.
Fluoride	ppm	2	2	1.7	nd - 1.7	Water additive that promotes strong teeth.
Nickel (2006 Data)	ppb	100	100	0.8	nd - 0.8	Erosion of natural deposits.
Disinfection/Disinfection By-product Contaminants						
Chlorine, Free Residual	ppm	4 (MRDL)	4 (MRDL G)	1.7	0.1 - 1.7	Disinfectant used in drinking water industry.
Haloacetic Acids, total	ppb	60	0	6.1	1.6 - 11.7	By-product of drinking water chlorination.
Dichloroacetic Acid	ppb	n/r		5.8	1.6 - 5.8	
Trichloroacetic Acid	ppb	n/r		5.9	nd - 5.9	
Trihalomethanes, total	ppb	80	0	23.5	17.6 - 28.9	
Bromodichloromethane	ppb	n/r		4.5	nd - 4.5	
Bromoform	ppb	n/r		1.7	nd - 1.7	By-product of drinking water chlorination.
Chloroform	ppb	n/r		23	nd - 23	
Dibromochloromethane	ppb	n/r		3.3	nd - 3.3	
Organic Contaminants						
Ethylbenzene (2006 Data)	ppb	700	700	2.6	n/a	Discharge from petroleum refineries.
Toluene (2006 Data)	ppb	1000	1000	6.9	n/a	Discharge from petroleum factories.
Xylenes, total (2006 Data)	ppb	10000	10000	11.4	n/a	Discharge from petroleum factories.
Unregulated Contaminants						
Alkalinity, Total	ppm	n/r		94	82 - 94	Fluctuations in iron removal process.
Chloride	ppm	n/r	250	12.5	12.3 - 12.5	
Hardness, Total	ppm	n/r		6.2	nd - 6.2	
Iron	ppb	n/r	300	830	40 - 830	
m,p-Xylene (2006 Data)	ppb	n/r		11.4	n/a	
pH, Field	0-14 scale	n/r		7.6	6.9 - 7.6	
Sodium	ppm	n/r		48.4	48.3 - 48.4	
Solids, Total Dissolved	ppm	n/r	500	168	116 - 168	
Sulfate	ppm	n/r	250	9.2	n/a	
Lead & Copper						
Action Level 90 th Percentile						
90th Percentile Lead (2007 Data)	ppb	15	0	3	nd - 7	Corrosion of household plumbing systems, Erosion of natural deposits
Number of Sites Exceeding Lead Action Level				0		
90th Percentile Copper (2007 Data)	ppb	1,300	0	499		Corrosion of household plumbing Systems, Erosion of natural deposits
Number of Sites Exceeding Copper Action Level				0		
Microbiological Contaminants						
Total Coliform	Absent results in 100 % of samples collected					Naturally present in the environment.

Contaminants tested for, but not found.

		Volatile Organic Contaminants		
Inorganic Contaminants Antimony Arsenic Beryllium Cadmium Mercury Nitrate Nitrite Nitrate/Nitrite Selenium Thallium	1,1,1,2-Tetrachloroethane	2-Hexanone	m,p-Xylene	
	1,1,1-Trichloroethane	3-chloro-1-propene	Methyl Isobutyl Ketone (MIBK)	
	1,1,2,2-Tetrachloroethane	4-Chlorotoluene	Methyl methacrylate	
	1,1,2-Trichloroethane	4-Isopropyltoluene	Methylene Chloride	
	1,1-Dichloroethane	Acetone	Methyl-t-butyl ether (MTBE)	
	1,1-Dichloroethene	Acrylonitrile	Naphthalene	
	1,1-Dichloropropene	Bromobenzene	n-Butylbenzene	
	1,2,3-Trichlorobenzene	Bromochloromethane	n-Propylbenzene	
	1,2,3-Trichloropropane	Benzene	o-Xylene	
	1,2,4-Trichlorobenzene	Carbon Disulfide	sec-Butylbenzene	
1,2,4-Trimethylbenzene	Carbon Tetrachloride	Styrene		
1,2-Dibromo-3-Chloropropane	Bromomethane	tert-Butylbenzene		
Radiological Contaminants Gross Alpha Emitters Gross Beta Emitters	1,2-Dibromoethane	Chlorobenzene	Tetrachloroethene	
	1,2-Dichlorobenzene	Chloroethane	Tetrahydrofuran (THF)	
	1,2-Dichloroethane	Chloromethane	tr-1,2-Dichloroethene	
	1,2-Dichloropropane	cis-1,2-Dichloroethene	tr-1,3-Dichloropropene	
	1,3,5-Trimethylbenzene	cis-1,3-Dichloropropene	trans-1,4-Dichlorobutene	
	1,3-Dichlorobenzene	Dibromomethane	Trichloroethene	
	1,3-Dichloropropane	Dichlorodifluoromethane	Trichlorofluoromethane	
	1,4-Dichlorobenzene	Ethyl methacrylate	Vinyl acetate	
	2,2-Dichloropropane	Hexachlorobutadiene	Vinyl chloride	
	2-Butanone (MEK)	Iodomethane		
2-Chloroethylvinyl Ether	Isopropylbenzene			
2-Chlorotoluene				
Synthetic Organic Contaminants (Pesticides/Herbicides/Insecticides)				
1,2-Dibromo-3-Chloropropane	Anthracene	Dicamba	Methiocarb	
1,2-Dibromoethane	Atrazine	Dieldrin	Methomyl	
2,4,5-TP (Silvex)	Benzo(a)anthracene	Diethylphthalate	Methoxychlor	
2,4-D	Benzo(a)pyrene	Dimethyl phthalate	Metolachlor	
2,4-dinitrotoluene	Benzo(b)fluoranthene	Di-n-butylphthalate	Metribuzin	
2,6-dinitrotoluene	Benzo(g,h,i)perylene	Dinoseb	Molinate	
2-Methyl Naphthalene	Benzo(k)fluoranthene	Endrin	Oxamyl (Vydate)	
3-Hydroxycarbofuran	Bis(2-ethylhexyl) phthalate	Eptam (EPTC)	PCBs	
4,4'-DDE	Butachlor	Ethylene Dibromide	Pentachlorophenol	
Acenaphthene	Butylbenzylphthalate	Fluoranthene	Phenanthrene	
Acenaphthylene	Carbaryl	Fluorene	Picloram	
Acetchlor	Carbofuran	Heptachlor	Propachlor	
Acifluorfen	Chrysene	Heptachlor Epoxide	Propoxur	
Alachlor	Dalapon	Hexachlorobenzene	Pyrene	
Aldicarb	Di(ethylhexyl)adipate	Hexachlorocyclopentadiene	Simazine	
Aldicarb Sulfone	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Terbacil	
Aldicarb Sulfoxide	Dibenzofuran	Lindane	Toxaphene	
Aldrin				

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:

90th PERCENTILE - A calculation based upon averaging the 4th and 5th 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 substance is unregulated.

PARTS PER BILLION (PPB) - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

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

City of Delaware City
407 Clinton Street
P. O. Box 4159
Delaware City, DE



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Hydrant Flushing
June 24th & 25th

Delaware City's fire hydrants will be flushed June 24th and 25th. Residents should expect some water discoloration during the process and should avoid washing light colored clothing.

For additional information, please see the bottom of the reverse side.

BOXHOLDER
DELAWARE CITY, DE
19706