

Consumer Confidence Report 2008

DOYLESTOWN TOWNSHIP MUNICIPAL AUTHORITY

CEDARCREST FARMS PWS # 1090158

Is my water safe?

In 2008, your tap water met all Federal Safe Drinking Water Act, Environmental Protection Agency (EPA) and Pennsylvania Department of Environmental Protection (DEP) drinking water health standards. We report that our system has not violated a maximum contaminant level or any other water quality standard during the 2008 year.

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 their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available by calling the Safe Drinking Water Hotline (800-426-4791).

Where does my water come from?

Doylestown Township Municipal Authority (DTMA) provides water through an inter-connection with North Wales Water Authority, (NWWA) which met or exceeded water quality standards as established under the Federal Safe Drinking Water Act and DEP regulations. Currently, 93% of the water supplied through the Bristol Road interconnection comes from the Delaware River via the Forest Park Surface Water Treatment Plant and the remaining 7% comes from ground water sources within the NWWA distribution area.

Source water assessment and its availability

Source water comes from underground aquifers and/or surface streams and rivers. Water is part of the environment we all live in. Protecting this environment is everyone's responsibility. Once a contaminant enters the underground aquifers and surface waters, the availability of potable water is impacted. Removing contaminants from water sources we depend upon, is far easier and less expensive when consumers dispose of chemicals and waste in an approved manner. No longer is it acceptable to "just pour it down the drain", whether sanitary or storm. Working together, we can assure ourselves a potable drinking water at a reasonable cost and its continued availability for generations to come.

Why are there contaminants in my drinking 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity such as: herbicides and pesticides that you apply to landscapes can and do run off into receiving streams and other surface waters. Household chemicals and pharmaceuticals flushed into the sanitary system can affect both surface and groundwater. Help protect our source water by proper disposal of all chemicals and pharmaceuticals. Types and sources of contaminants are: Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, 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, urban storm water runoff, and residential uses; organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

“WATER IS LIFE” and we can all play an important role in protecting and conserving this life sustaining resource. First, be aware of what goes down the drain, be-it sanitary or storm drain, can alter the potential for contamination of our water sources. Secondly, conserve water by washing clothes or dishes when you have full loads; use water saving devices and make timely repair to plumbing leaks. These are just a few of many ways you can lessen your daily demand for fresh water and to keep it safe for everyday use.

Questions regarding this report may be directed by mail to the Authority office at 425 Wells Road, Doylestown, Pennsylvania 18901 or by phone at 215-348-9915 to the attention of the Authority's Water Superintendent, Stephen Oiler or to Scott Miele, Chief Water Operator.

Este infome contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Water Quality Table

The table below lists all of the drinking water contaminants that were detected by DTMA and NWWA during the 2008 calendar year. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done during 2008. DTMA's permit requires we test for certain contaminants less than once per year. This is because the concentrations of these contaminants do not change frequently.

	<u>MCLG</u>	<u>MCL,</u>						
	<u>or</u>	<u>TT, or</u>	<u>Your</u>	<u>Range</u>		<u>Sample</u>		
<u>Contaminants</u>	<u>MRDLG</u>	<u>MRDL</u>	<u>Water</u>	<u>Low</u>	<u>High</u>	<u>Date</u>	<u>Violation</u>	<u>Typical Source</u>
							<u>Yes/No</u>	

Disinfectants & Disinfection By-Products

(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)

Chlorine (as Cl ₂) (ppm)	4	4	0.36	0.10	1.06	2008	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	0	60	14.30	2.7	26.4	2008	No	By-product of drinking water chlorination
Total Organic Carbon (percent removal)	NA	TT	NA	52.7	62.8	2008	No	Naturally present in the environment
TTHMs [Total Trihalomethanes] (ppb)	0	80	18.12	4.8	38.8	2008	No	By-product of drinking water disinfection

Inorganic Contaminants

<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Water</u>	<u>Date</u>	<u>Exceeding</u>	<u>Exceeds</u>	<u>Typical Source</u>	
					<u>AL</u>	<u>AL</u>		
Copper* (ppm)	1.3	1.3	0.375*	2008	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead *(ppb)	0	AL=15	0*	2008	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.	

<u>Contaminants</u>	<u>MCLG</u>	<u>MCL</u>	<u>Your</u>	<u>Range</u>	<u>Range</u>	<u>Sample</u>	<u>Violation</u>	<u>Typical Source</u>
			<u>Water</u>	<u>Low</u>	<u>High</u>	<u>Date</u>	<u>Yes/No</u>	
Arsenic (ppb)	0	10	0	ND	ND	2008	No	Runoff from orchards; Runoff from glass and electronics production
Barium (ppm)	2	2	0.0143	0	0.0143	2008	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	0	ND	ND	2008	No	Discharge from steel and pulp mills; Erosion of natural deposits
Nitrate (as Nitrogen) (ppm)	10	10	2.61	0	5.10	2008	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nickel (ppb)	100	100	0.01	N/A	N/A	2008	No	Byproduct of various industrial processes; erosion of natural deposits.

*Naturally occurring levels of lead and copper in the source water are non-detectable. This table represents the level detected in the 90th percentile of homes monitored in accordance with the US-EPA Lead and Copper Rule. None of the homes exceeded the Action Level (AL).

Contaminants	MCLG Or MRDLG	MCL Or TT or MRDL	Your Water	Range Low	Range High	Sample Date	Violation Yes/No	Typical Source
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Microbiological Contaminants

A violation occurs when a routine sample and a repeat sample, in any given month, are total coliform positive, and one is also fecal coliform or E. coli positive.

2Fecal coliform/E. coli (positive samples)	0	0*	0	N/A	N/A	2008	No	Human and animal fecal waste
2Total Coliform (positive samples/month)	0	More than 1 positive monthly sample	0	N/A	N/A	2008	No	Naturally present in the environment
2Turbidity (NTU)	0	TT	0.02	0.01	0.04	2008	No	Soil Runoff
2Total Organic Carbon (percent removal)	N/A	TT	N/A	52.7%	62.8%	2008	No	Naturally present in The environment

Radioactive Contaminants

<u>Contaminants</u>	MCLG	MCL	Your Water	Range Low	Range High	Sample Date	Violation Yes/No	<u>Typical Source</u>
Gross Alpha (pCi/L)	0	15	3.09	2.36	3.82	2008	No	Erosion of natural deposits.
Uranium (ug/L)	0	30	7.39	3.39	11.40	2008	No	Erosion of natural deposits.

2Data presented in the above table is from calendar year 2008 monitoring performed in accordance with regulations of the Pennsylvania of Environmental Protection. Coliform bacteria, disinfection residual and turbidity are monitored on a continuous basis and reported monthly. All samples collected exceeded the required Total Organic Carbon removal of 25-45%. Raw water monitoring (before treatment) for Giardia and Cryptosporidium was performed monthly throughout 2008. Giardia was detected in 5 out of 12 samples and Cryptosporidium was detected in 4 out of 12 samples. Forest Park Surface Water treatment processes are designed to remove or inactivate Giardia and Cryptosporidium cysts with a high level of certainty. Current available test methods do not allow Forest Park Surface Water to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However,, immune-compromised people are at greater risk of developing life-threatening illness. DTMA encourages immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium and Giardia must be ingested to cause disease, and it may be spread through means other than drinking water.

2Nitrate in drinking water at levels above 10ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

IMPORTANT DRINKING WATER DEFINITIONS AND UNIT DESCRIPTIONS

Unit Descriptions

<u>Term</u>	<u>Definition</u>
ug/L	ug/L : Number of micrograms of substance in one liter of water
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
ppt	ppt: parts per trillion, or nanograms per liter
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
MFL	MFL: million fibers per liter, used to measure asbestos concentration
positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive
positive samples	positive samples/yr: The number of positive samples taken that year
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions

<u>Term</u>	<u>Definition</u>
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Permissible Level

BELOW IS A LIST OF CONTAMINANTS WHICH WERE MONITORED FOR IN 2008 BUT DID NOT DETECT.

Volatile Organic Chemicals

The Volatile Organic Contaminants listed below were monitored for in 2008 but not detected:

<u>BENZENE</u>	<u>ETHYLBENZENE</u>
<u>CARBON TETRACHLORIDE</u>	<u>METHYL TERTIARY BUTYL ETHER</u>
<u>CHLOROBENZENE</u>	<u>STYRENE</u>
<u>O-DICHLOROBENZENE</u>	<u>TETRACHLOROETHYLENE</u>
<u>P-DICHLOROBENZENE</u>	<u>1,2,4-TRICHLOROBENZENE</u>
<u>1,2-DICHLOROETHANE</u>	<u>1,1,1- TRICHLOROETHANE</u>
<u>1,1-DICHLOROETHYLENE</u>	<u>1,1,2-TRICHLOROETHANE</u>
<u>CIS-1,2-DICHLOROETHYLENE</u>	<u>TRICHLOROETHYLENE</u>
<u>TRANS-1,2-DICHLOROETHYLENE</u>	<u>TOLUENE</u>
<u>DICHLOROMETHANE</u>	<u>VINYL CHLORIDE</u>
<u>1,2-DICHLOROPROPANE</u>	<u>XYLENES</u>

Synthetic organic contaminants Including Pesticides & Herbicides

The Synthetic Organic Contaminants, Pesticides & Herbicides listed below were monitored for in 2008 but not detected:

<u>2,4-D</u>	<u>ENDRIN</u>
<u>2,4,5-TP(SILVEX)</u>	<u>HEPTACHLOR</u>
<u>ALACHLOR</u>	<u>HEPTACHLOR EPOXIDE</u>
<u>ATRAZINE</u>	<u>HEXACHLOROBENZENE</u>
<u>BENZO(A)PYRENE(PAH)</u>	<u>HEXACHLOROCYCLOPENTADIENE</u>
<u>CHLORDANE</u>	<u>LINDANE</u>
<u>CARBOFURAN</u>	<u>METHOXYCHLOR</u>
<u>DALAPON</u>	<u>OXAMYL</u>
<u>DICAMBA</u>	<u>PENTACHLOROPHENOL</u>
<u>DI(2-ETHYLHEXYL)ADIPATE</u>	<u>PICLORAM</u>
<u>DI(2-ETHYLHEXYL)PHTHALATE</u>	<u>SIMAZINE</u>
<u>DINOSEB</u>	<u>TOXAPHENE</u>

Inorganic Contaminants

The Inorganic Contaminants listed below were monitored for in 2008 but not detected:

ANTIMONY	CYANIDE
ARSENIC	FLUORIDE
ASBESTOS	MERCURY
BERYLLIUM	NITRITE
CADMIUM	SELENIUM
CHROMIUM	THALLIUM