2011 Annual Water Quality Report

DOYLESTOWN BOROUGH WATER SYSTEM
57 W. COURT STREET
DOYLESTOWN, PENNSYLVANIA 18901
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THIS REPORT CONTAINS IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

Consumer Confidence Report Rule

In 1996, Congress amended the Safe Drinking Water Act, adding a provision that requires all community water systems to deliver to their customers a brief annual water quality report. Final regulations were promulgated by EPA in 1998, known as the Consumer Confidence Report Rule, which established the requirements for these annual water quality reports. The deadline for distribution of the annual report is July 1st of every year, for the preceding calendar year.

Treatment of 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 EPA's Safe Drinking Water Hotline at (800) 426-4791 or by visiting EPA's website at www.epa.gov/safewater.

Ground water withdrawn from the Doylestown area is treated within the well houses before being pumped into the distribution system. Treatment chemicals added include: Sodium Hypochlorite (Chlorine), Sodium Hydroxide (Caustic Soda), and SNC Type-B (ortho / poly phosphonate blend). Chemical addition is necessary for disinfection, PH remediation, and corrosion control respectively. Disinfection is necessary to inactivate microorganisms which are naturally present in the environment. The treated water is pumped through the distribution system to storage tanks.

Doylestown Sources of Water

The water system, owned and operated by the Doylestown Borough is permitted under the Pennsylvania Safe Drinking Water Act and is identified as PWS ID No. 1090081.

The drinking water is drawn from five wells located throughout the borough, and are classified as ground water sources. As rainwater and melted snow travels through the surface of the earth, it dissolves naturally and unnaturally occurring minerals and radioactive material and may pick up different substances.

Doylestown maintains two finished water storage tanks. The first, with a capacity of 1,00,000 gallons is located at the corner of Spruce St. and E. Court St. The second, with a capacity of 400,000 gallons is in the woods near Veterans Memorial Park.

The borough also receives water from the Doylestown Township Municipal Authority (DTMA) through an interconnect located on Memorial Dr.

Safety of Drinking Water

Some people may be more vulnerable to drinking water contaminants than the general population. Immuno-compromised persons, such as people 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 guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from EPA's Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater.

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For More Information About Your Water:

Doylestown Borough Council Meetings

Third Monday of every Month.
Meetings @ 7:00 PM

Meeting Location
Borough Hall:
57 W. Court St.
Doylestown, PA

Contact Person:
Chris Norris
Director of Water Operations
215-345-4140

Public Water System ID# 1090081

Inside this issue:

Common Contaminants in Water

Contaminants that may be present in the source water include:

- Microbial contaminants, such as viruses and bacteria, which 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, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

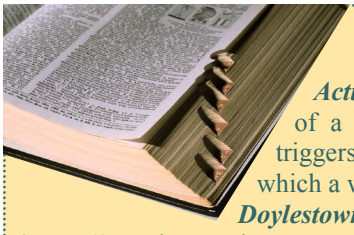
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes, and which may also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of mining activities.

In order to ensure that tap water is safe to drink, EPA establishes regulations which limit the amount of certain contaminants in water provided by public water systems.

Contaminants Detected in Your Water

The Doylestown Borough is pleased to report that the water that you drink has complied with all federal and state drinking water standards during 2011.

However, even with the best water treatment, it is not always possible to remove all contaminants. Earth and rock act as natural filters and remove many of these contaminants. The water department tested for approximately 95 different contaminants during the past 5 years. Not all of these contaminants are required to be tested every year. Of those 95 contaminants tested, only 20 different contaminants were detected, all of which are within acceptable levels with the exception of copper in the township system. These 20 different contaminants and their potential sources of contamination are shown on the following pages. Contaminants tested but not detected include the following: E. coli, Total Coliform, 27 Synthetic Organic Contaminants, and 14 Volatile Organic Contaminants.



Definitions of Terms

***Action Level (AL)*:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

***Doylestown Township Municipal Authority (DTMA)*:** The Doylestown Borough provides water to parts of the township and receives water of an equal amount as payment from the township's water system.

***Maximum Contaminant Level (MCL)*:** 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 (MCLG)*:** 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 Residual Disinfectant Level (MRDL)*:** The highest level of disinfectant residual, in this case for Chlorine, that is allowed in drinking water.

***Maximum Residual Disinfectant Level Goal (MRDLG)*:** The level of disinfectant residual in drinking water, in this case for Chlorine, below which there is no known or expected risk to health.

Minimum Residual Disinfectant Level (Min. RDL): The minimum level of residual disinfectant required at the entry point to the distribution system.

***Parts Per Billion (ppb)*:** Unit of concentration equivalent to micrograms per Liter (µg/L).

***Parts Per Million (ppm)*:** Unit of concentration equivalent to milligrams per Liter (mg/L).

***Picocuries per Liter (pCi/L)*:** Measure of radiation.

***Treatment Technique (TT)*:** A required process intended to reduce the level of a contaminant in drinking water.

SWAP Plan

A source water assessment and protection (SWAP) plan was prepared by the Delaware River Basin Commission (DRBC), on behalf of the Pennsylvania Department of Environmental Protection (DEP), for Doylestown's wells. The purpose of SWAP plans is to determine potential sources of pollution that may impact public water supplies and the appropriate measures to be taken to protect such water supplies. The core assessment issues of the South Branch Conewago Creek Watershed include contamination from agricultural activities, urban runoff and industrial point sources. The final report is available from DEP upon request.

PENNSYLVANIA SOURCE WATER PROTECTION

Safe Drinking Water Starts at the Source!

TABLE OF CONTAMINANTS

Contaminants	MCL	MCLG	Test Value[1]	Major Sources in Drinking Water
INORGANIC CONTAMINANTS				
Arsenic	10 ppb	NA	3.6 ppb (2009) 5.5 ppb (2009) DTMA	Erosion of natural deposits. Discharge from refineries and factories.
Barium	2 ppm	2 ppm	0.048 ppm (2009) DTMA	Erosion of natural deposits.
Nitrate	10 ppm	10 ppm	Range: 1.62 - 5.34 ppm Range: 1.12 - 5.93 ppm DTMA	Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks & sewage.
Nitrite	1 ppm	1 ppm	Range: 0 - 0.01 ppm DTMA	Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks & sewage.
VOLATILE CONTAMINANTS				
1,1-Dichloroethylene	7 ppb	7 ppb	Avg. 0.7 ppb Range: 0 - 2.4 ppb	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene	70 ppb	70 ppb	Avg. 0.05 ppb Range: 0 - 0.18 ppb	Discharge from industrial chemical factories
1,1,1-Trichloroethane	200 ppb	200 ppb	Avg. 0.28 ppb Range: 0 - 1.02 ppb	Discharge from metal degreasing sites and other factories
Carbon tetrachloride	5 ppb	0 ppb	Avg. 0.27 ppb Range: 0 - 1.07 ppb	Discharge from chemical plants and other industrial activities
Tetrachloroethylene	5 ppb	0 ppm	Range: 0 - 1.12 ppb Range: 0 - 1.90 ppb DTMA	Discharge from factories and dry cleaners
1,1,2-Trichloroethane	5 ppb	3 ppb	Avg. 0.01 ppb Range: 0 - 0.16 ppb	Discharge from industrial chemical factories
Ethylbenzene	700 ppb	700 ppb	Avg. 0.04 ppb Range: 0 - 0.58 ppb DTMA	Discharge from petroleum refineries
Xylenes	10 ppm	10 ppm	Range: 0 - 0.003 ppm DTMA	Discharge from petroleum factories; Discharge from chemical factories
RADIOLOGICAL CONTAMINANTS				
Gross Alpha	15 pCi/L	0 pCi/L	Single detect: 5.49 pCi/L DTMA	Erosion of natural deposits
Combined Uranium	30 ppb	0 ppb	Range: 0.5 ppb - 2.9 ppb Range: 0 ppb - 3.5 ppb DTMA	Erosion of natural deposits
Radium 226 / 228	5 pCi/L	0 pCi/L	Range: 0.35 ppb - 0.93 ppb Range: 0 ppb - 1.1 ppb DTMA	Erosion of natural deposits

[1] Pennsylvania DEP allows public water systems to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data presented on this table, though representative, may be more than one year old. In these cases, the calendar year in which water samples were tested for these contaminants is shown in parentheses.

TABLE OF CONTAMINANTS				
Contaminants	**MCL**	**MCLG**	**Test Value[1]**	**Major Sources in Drinking Water**
LEAD AND COPPER RULE				
Copper	AL = 1.3 ppm	1.3 ppm	90th Percentile: 0.5 ppm **90th Percentile: 1.6 ppm DTMA (2010)**	Corrosion of household plumbing systems. Erosion of natural deposits.
Lead	AL = 15 ppb	0 ppb	90th Percentile: 3.7 ppb 90th Percentile: 4.8 ppb DTMA	Corrosion of household plumbing systems. Erosion of natural deposits.
SYNTHETIC ORGANIC CONTAMINANTS				
Di(2-ethylhexyl) phthalate	6 ppb	0 ppb	Avg. 0.19 ppb Range: 0 - 1.3 ppb	Discharge from rubber and chemical factories
DISINFECTION BYPRODUCTS (DBPS), PRECURSORS AND DISINFECTANT RESIDUALS				
Free Chlorine	MRDL = 4.0 ppm	MRDLG = 4.0 ppm	Avg. High: 1.07 ppm Avg. Low: 0.68ppm Avg. High: 0.78 ppm DTMA Avg. Low: 0.42 ppm DTMA	Water additive used to control microbes.
Haloacetic Acids	60 ppb	NA	Range: 0.4 - 6.1 ppb Range: 0.0 - 4.3 ppb DTMA (2008)	Byproduct of drinking water chlorination.
Total Trihalomethanes	80 ppb	NA	Range: 0.5 - 16.8 ppb Range: 0.0 - 16.0 ppb DTMA (2008)	Byproduct of drinking water chlorination.
GROUND WATER TREATMENT RULE (GWTR)				
Free Chlorine	Min. RDL = 0.2 ppm	NA	Range: 2.41 - 0.45 ppm Range: 1.82 - 0.20 ppm DTMA	Water additive used to control microbes.

[1] Pennsylvania DEP allows public water systems to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data presented on this table, though representative, may be more than one year old. In these cases, the calendar year in which water samples were tested for these contaminants is shown in parentheses.

Information about Lead:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. New Oxford Municipal Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead

Information about Arsenic:

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Information about Nitrate:

Nitrate in drinking water at levels above 10 ppm 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 for advice from your health care provider.

Doylestown Borough Council Members

Libby White: Mayor
Dennis McCauley
David Laustsen
Susan Madian
Don Berk

Det Ansinn: Council President
Marlene Pray
Elnora 'Noni' West
Joan Doyle
Kevin Kelly