

## Doylestown Borough's 2010 Water Quality Report

(PWSID 1090081)

*Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.*

We are pleased to present to you this year's annual drinking water quality report. This report is designed to inform you about the quality of the water and the services we deliver each day. Our constant goal is to supply you with dependable drinking water. We want you to understand the efforts we make to continually monitor the treatment process and protect our water resources. We are committed to insuring the quality of your drinking water. This report shows our water quality and what it means.

It would be difficult to address water quality and efforts to maintain our high standards without first acknowledging how the lingering world unrest continues to influence how our water resources are protected both before and after treatment. Doylestown Borough is ever vigilant to changes occurring to areas that surround our source waters. Our approach to land use that could impact on water quality or quantity is uncompromising. Doylestown Borough has once again met all of the Safe Drinking Water Standards and has not exceeded the MCL of any constituent.

Should you have any questions regarding this report or our water utility in general please contact Mr. Craig Eaton, Director of Water Operations, at 215-345-4140 or attend the Water Committee meetings held the first Thursday of each month at 6:30 PM in the Borough Hall, 57 West Court Street, Doylestown, PA .

The Borough of Doylestown routinely monitors for constituents in the drinking water according to applicable federal and state laws. The proceeding table shows results from the period January 1, 2010 through December 31, 2010.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents do not necessarily pose a health risk. Our water sources are from wells located within the limits of the Borough. Water supplied to

system customers has been disinfected with sodium hypochlorite injected at each source. Distribution system disinfectant residuals range from 0.53-1.04 ppm. In the proceeding table you find terms and abbreviations which may be unfamiliar to you. To aid you in better understanding them, please find the following definitions:

**ND(non/not detected)**- laboratory analysis indicates this contaminate is not present in detectable limits.

**Parts per million (ppm) or Milligrams per liter (mg/L)** one part per million equates to one minute in two years or 1 cent in \$10,000

**Parts per billion (ppb) or Micrograms per liter (ug/L)** one part per billions equates to 1 minute in 2000 years or 1 cent in \$10,000,000

**Pico curies per liter (pCi/L)** is a unit of measure for radioactivity in water.

**Action Level (A/L)** The concentration of a contaminate which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Maximum Contaminate Level (MCL)** Is the highest level of a contaminate permitted in drinking water. MCL's are set close to MCLGs as feasible using the best available treatment technology.

**Maximum Contaminate Level Goal (MCLG)** The level of a contaminate in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL)** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminates.

**Maximum Residual Disinfectant Level Goal (MRDLG)** The level of a drinking water disinfectant below which there is no known or expected health risk. MRDLGs do not reflect the benefit the use of disinfectants have to control microbial contamination.

In the following table you will notice that, contained within a specific contaminate, both Doylestown Borough (DBWD) and Doylestown Township (DTMA) are listed. Our systems are interconnected and when both systems have tested for a contaminate each systems' respective results are listed

This year's report shows our efforts continue to have a positive impact on our treatment processes and the quality of the water we provide. In 2010, water supplied by Doylestown Borough met or exceeded all federal and state health standards. All sources of drinking water are subject to potential contaminants that are naturally occurring or man made. These contaminants can be microbes, organic or inorganic chemicals, or radioactive materials. Drinking water, including bottled water, may be reasonably expected to contain at least some small amount of these 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 @ 1-800-426-4791**. The sources of drinking water, including bottled and tap water, includes lakes, rivers, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, in some cases radioactive materials, and can pick-up substances resulting from the presence of animal or human activity. Contaminates that may be present in source water may include:

- Microbial contaminants such as viruses and bacteria which may come from sewage treatment plants, septic systems, agriculture/livestock operations and wildlife
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential use.
- Organic chemical contaminants, including synthetic or volatile organic chemicals, which are byproducts of industrial processes, petroleum production or mining activities.
- Alpha Emitters: Certain minerals are radioactive and may emit a form of radiation. Some people who drink water containing alpha emitters in excess of the MCL, over many years may have an increased risk of getting cancer.
- Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 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 agriculture activities. If you are caring for an infant, you should ask for advice from your health care provider.
- Inorganic Contaminates such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

- **Arsenic**: Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

***Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer, undergoing chemotherapy, those who have had organ transplants, people with AIDS/HIV or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice 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 (800-426-4791)***

In order to insure that tap water is safe to drink EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same level of protection to the public's health. ***Lead in drinking water is rarely the sole cause of lead poisoning, but can add to an individual's total lead exposure. All potential sources of lead in the household should be identified and removed replaced or reduced. Water samples taken from Doylestown Boroughs' supply wells have consistently tested negative for lead.***

Our water department is constantly searching for ways to improve. Upgrading treatment methods, installing new water mains, replacing fire hydrants, and updating our meter system are just some of the ways our utility strives to improve our service to you.

#### **Our Mission Statement**

Doylestown Boroughs' Water Department is committed to providing its' customers with safe drinking water that consistently meets or exceeds the requirements of the Safe Drinking Water Act. We will provide this product at the most reasonable cost possible but never sacrificing quality for cost.

-----**Water Quality Table**

Contaminant (unit of measurement)	Violation (Y or N )	L e v e l Detected	Range	MCL in CCR units	MCLG	Major sources in Drinking Water
<b>INORGANIC CONTAMINATES</b>						
<u>Arsenic (ppb) (2009) DBWD</u> (DTMA results) (2009)	(N) (N)	3.6 5.5	0.0-3.6 0-5.5	10 (10)	0 (0)	Erosion of natural deposits. Runoff from orchards or glass or electronic production
<u>Barium (ppm) (2006) DBWD</u> (DTMA results) (2009)	(N) (N)	0.645 0.480	.190-.645 0-480	2 (2)	2 (2)	Discharge from drilling waste or metal refineries. Erosion of natural deposits
<u>Nitrate(ppm) DBWD (2010)</u> (DTMA results) (2010)	(N) (N)	5.05 5.45	1.4-5.05 1.09-5.45	10 (10)	10 (10)	Runoff from fertilizer use. Leaching from septic tanks ;sewage Erosion of natural deposits
<b>RADIOLOGICAL CONTAMINATES</b>						
<u>Combined Radium (226 &amp; 228) (pCi/L) (2006) DBWD</u> (DTMA results)(2006)	(N) (N)	0.594 1.37	0.00-0.594	7.45 (7.45)	0 (0)	Erosion of natural deposits
<u>Uranium (ppb) (2002) DBWD</u> (DTMA results) (2006-2008)	(N) (N)	9.81 2.97	1.46-9.81 2.97-12.3	30 (30)	0 (0)	Erosion of natural deposits
<u>Gross Alpha (pCi/L) (2005) DBWD</u> (DTMA results) 2006-2008	(N) (N)	6.91 8.35	0.00-6.91 0.4-13.9	22.36 (15)	0 (0)	Erosion of natural deposits
<b>VOLATILE ORGANIC CONTAMINATES</b>						
<u>cis-1,2 Dichloroethylene (ppb)</u>	(N)	0.26	0.0-0.26	70	70	Discharge from chemical factories
<u>Carbon Tetrachloride (ppb)</u>	(N)	1.16	0.0-1.16	5	0	Discharge from chemical factories
<u>Trichloroethylene (ppb)</u>	(N)	.89	0-.89	5	0	Discharge from metal degreasing sites and other factories
<u>Tetrachloroethylene (ppb) DBWD</u>	(N)	1.17	0-1.17	5	0	Discharge from factories/dry cleaners
<u>1,1-Dichloroethylene (ppb)</u>	(N)	2.4	0-2.40	7	7	Discharge from chemical factories
<u>1,1,1-Trichloroethane (ppb)</u>	(N)	1.07	0-1.07	200	200	Discharge from metal degreasing sites and other factories
<u>Toluene (ppm)</u> (DTMA results)	(N) (N)	0.00 0.0009	0.00 0-0.0009	(1) (1)	(1) (1)	Discharge from petroleum factories
<u>Xylenes (ppm)</u>	(N)	0.00	0.00	(10)	(10)	Discharge from petroleum and chemical factories
<b>LEAD AND COPPER RULE</b>						
<u>Copper(ppm) (2009) @ consumer taps (ppm) DBWD</u> <b>(DTMA results 2010)</b>	(N) <b>(Y)</b>	.582 <b>3.3</b>	No Boro sample exceeded the AL <b>.075-3.3</b>	Action Level = 1.3	1.3	Corrosion of household plumbing. Erosion of natural deposits; leaching from wood products
<u>Lead (ppb) (2009)@ consumer taps(ppb) DBWD</u> (DTMA results 2010)	(N) (N)	4.10 8.81	No sample exceeded the AL	Action Level = 15	0	Corrosion of household plumbing. Erosion of natural deposits
<b>DISINFECTION BYPRODUCTS, BYPRODUCTS PRECURSORS, AND DISINFECTANT RESIDUALS</b>						
<u>Total trihalomethanes (ppb) DBWD 2008</u> (DTMA) 2008	(N) (N)	2.31 16	0-2.31 0-16	80 (80)	0 (0)	Byproduct of drinking water chlorination
<u>Chlorine Residual (ppm) DBWD 2009</u> (DTMA) 2009	(N) (N)	1.01 .28	0.49-1.01 0.20-1.31	MRDL =4	MRDL G=4	Water additive used to control microbes

Halocetic Acids (ppb)						
DBWD 2008	(N)	0.362	0.0-0.362	(60)	0	Byproduct of drinking water disinfection
(DTMA) 2008	(N)	4.3	0-4.3	(60)	(0)	