

## Undetected Impurities Tested for by the Birdsboro Municipal Authority and the Borough of Birdsboro

### Volatile Organic Chemicals – (2010)

1,1,1-Trichloroethane  
 1,1,2-Trichloroethane  
 1,1-Dichloroethylene  
 1,2,4-Trichlorobenzene  
 1,2-Dichlorobenzene  
 1,2-Dichloroethane  
 1,2-Dichloropropane  
 Benzene  
 Carbon Tetrachloride  
 Chlorobenzene  
 cis-1,2-Dichloroethylene  
 Dichloromethane  
 Ethylbenzene  
 para-Dichlorobenzene  
 Methylene Chloride (2003)  
 Styrene  
 Tetrachloroethylene  
 Toluene  
 trans-1,2-Dichloroethylene  
 Trichloroethylene  
 Vinyl Chloride  
 Xylenes (Total)

### Synthetic Organic Chemicals – (2010)

1,2-Dibromo-3-Chloropropane  
 Alachlor  
 Benzo(A)pyrene  
 Bis (2-ethylhexyl)phthalate  
 Di (2-ethylhexyl)adipate  
 Ethylene Dibromide  
 Hexachlorocyclopentadiene  
 Methoxychlor  
 Oxamyl  
 Pentachlorophenol  
 Picloram  
 Carbofuran  
 Chlordane  
 Endothall  
*Carbaryl (2007)*  
*Methomyl (2007)*  
*Aldicarb Sulfoxide (2007)*  
*Aldicarb Sulfone (2007)*  
*Metolachlor (2007)*  
*Aldicarb (2007)*  
*3-Hydroxycarbofuran (2007)*  
*Dicamba (2007)*

### Inorganic Contaminants – (2010)

Arsenic  
 Lead  
 Nitrate and Nitrite Nitrogen

### Inorganic Contaminants – (2003 - 2006)

Antimony (2003)	Fluoride (2003)
Barium (2003)	Iron (2006)
Beryllium (2003)	Mercury (2003)
Cadmium (2003)	<i>Nickel (2003)</i>
Chromium (2003)	Selenium (2003)
Cyanide (2003)	Thallium (2003)

### Microbiological Contaminants – (2010)

Total Coliforms

### Radiological Contaminants – (2003)

Gross Alpha                      Radium 226

\* Contaminants not regulated by the DEP are shown in italics.

**Note:** Not all contaminants are sampled for every year, according to DEP regulations.

Those contaminants that were not sampled for in 2010 are noted with the last year of sampling.

### Know the Health Effects (Continued):

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 guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The sources of drinking water include Indian Run and Stinson Run Reservoirs, Dyer Quarry, and Hay Creek. It is important to note that the major source of water for our residents comes from springs, located in the mountains surrounding Birdsboro. These sources then flow into our reservoirs. This minimizes the opportunity for surface run-off problems that could lead to contamination by the above referenced constituents. The water is then piped to the treatment plant for control and monitoring of referenced parameters. We provide coagulation, sedimentation, filtration and disinfection treatment prior to distribution into the system.

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

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**Borough of Birdsboro**  
 202 East Main Street  
 Birdsboro, PA 19508

# 2010 Borough of Birdsboro Quality on Tap Consumer Confidence Report



We're pleased to present the year 2010 "Quality on Tap" Consumer Confidence Report to you. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources consist of spring fed reservoirs, Dyer Quarry and the Hay Creek.

**Birdsboro Municipal Authority**  
 202 East Main Street, Birdsboro, PA 19508  
**Public Water Supply Identification (PWSID)**  
 Number 3060010

## A Message from... Birdsboro Municipal Authority:

Our commitment is to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.

In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments.

In 2010, the Authority approved design of a 1.0 million gallon per day (mgd) water treatment plant. The Authority has been working with their engineer to construct a water treatment plant that will meet today's standards as well as future needs. Proposed new Safe Drinking Water Act regulations will make it impossible for the existing treatment plant to meet the new water quality standards within the next few years.

The operators work hard to maintain the water sources, treatment plant, and water distribution system. Improvements to the Indian Run Dam and the water distribution system are being discussed as future projects to maintain water quality and meet current and future regulations.

The Birdsboro Municipal Authority meets on the third Monday of the month at 6:30 P.M. in the borough hall.

We are pleased to report that our drinking water meets federal and state requirements.

### Need More Information?

If you have any questions about this report or concerning your water utility, please contact:

Mr. Aaron Durso, Borough Manager  
**Borough of Birdsboro**  
202 East Main Street  
Birdsboro, PA 19508  
Telephone: (610) 582-6030

Or contact the Customer Service line at:  
(610) 582-3000

Also, please visit our Website:  
[www.birdsboroma.com](http://www.birdsboroma.com)

## What does it mean?

As you can see by the table, our system had no MCL violations. We are proud that your drinking water meets and exceeds all federal and state requirements. The Borough routinely monitors for constituents in your drinking water according to federal and state laws. This table shows any positive results from our monitoring for the period of January 1 through December 31, 2010.

### Definitions:

In the table at the right, you may find some terms and abbreviations that might not be familiar to you. To help you better understand these terms, we've provided the following definitions:

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

**MCL: Maximum Contaminant Level:** The "Maximum Allowed" 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.

**MCLG: Maximum Contaminant Level Goal:** The "Goal" 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.

**mg/l: Milligrams per liter:** one milligram per liter corresponds to one minute in two years, or a single penny in \$10,000.

**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.

**MRDLG: Maximum Residual Disinfectant 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 contamination.

**pCi/L: Picocuries per liter:** Picocuries per liter is a measure of the radioactivity in water.

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

**ug/l: Micrograms per liter:** one microgram per liter corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

## Impurities Detected by the Birdsboro Municipal Authority

Substance	BMA Highest Detected Level	Range of BMA Detected Levels	Highest Level Allowed (MCL)	EPA MCLG (EPA Goal)	Sources of Contaminant	Violation Y / N ?	
<b>Disinfectant and Disinfectant By-Products</b>							
Chlorine	1.00 mg/L	0.95 - 1.00 mg/L	4.0 mg/L	4.0 mg/L	Water additive used to control microbes	N	
Total Alkalinity (1/2005)	12 mg/L	12 mg/L	N/A mg/L	N/A mg/L	Naturally occurring soluble mineral salts	N	
Haloacetic Acids (HAA5) <sup>1</sup>	56 ug/L	41 - 71 ug/L	60 ug/L	N/A ug/L	By-product of drinking water disinfection	N	
Total Trihalomethanes (TTHMs) <sup>1</sup>	51 ug/L	27.3 - 63.5 ug/L	80 ug/L	N/A ug/L	By-product of drinking water chlorination	N	
<b>Total Organic Carbon</b>							
Total Organic Carbon**	1.4 mg/L	0.8 - 1.4 mg/L	TT mg/L	N/A mg/L	Naturally present in the environment	N	
<b>Entry Point Disinfectant Residual</b>							
Substance	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Source of Contaminant	Violation Y / N ?
Chlorine (ppm)	0.2	0.92	0.92 - 1.28	ppm	8/2/2010	Water additive used to control microbes	N
<b>Lead and Copper Rule (8/2010)<sup>2</sup></b>							
Substance	BMA Detection Range	90 <sup>th</sup> Percentile Value	Action Level	EPA MCLG	# of Sites Above AL of Total Sites	Sources of Contaminant	Violation Y / N ?
Copper	0.002 - 0.126 mg/L	0.094 mg/L	1.3 mg/L	1.3 mg/L	0 of 20	Geology, leaching, corrosion	N
<b>Physical Properties</b>							
Substance	MCL	EPA MCLG (EPA Goal)	Highest Measurement	Sources of Contaminant	Violation Y / N ?		
Turbidity <sup>3</sup> **	TT	0	0.075 NTU	Soil runoff	N		
<b>Secondary (Aesthetic) Contaminants (8/2006)</b>							
Substance	BMA Highest Detected Level	Range of BMA Detected Levels	Highest Level Allowed (MCL)	EPA MCLG (EPA Goal)	Sources of Contaminant	Violation Y / N ?	
Manganese <sup>4</sup>	0.152 mg/L	0.152 mg/L	0.05 mg/L	0.05 mg/L	Geology, naturally present in environment	N	

#### Notes:

\* Not all impurities are sampled for every year, according to DEP standards. Those not sampled in 2010 are noted with the last year of sampling.

\*\* Total Organic Carbon in the Raw Water has no health effects but it can provide a medium for the formation of disinfection byproducts.

- Starting in January 2004, Birdsboro takes one sample per quarter of both HAA5 and TTHMs. The reported highest detected values represent the highest annual average of the samples taken, averaging the quarterly values from the last 4 quarters.
- The action level for Lead and Copper serves as a trigger for water systems to take additional treatment steps if exceeded in more than 10% of tap water samples. The Action Level for Lead is 15 ug/l, and the Action Level for Copper is 1.3 mg/L. No Copper samples taken were above the required Action Level (AL) shown above, and Lead was not detected in any of the samples taken in 2010.
- TT=Treatment Technique; to meet TT standard, at least 95% of monthly samples must be less than or equal to 0.30 NTU. Also, no single sample may exceed 1.0 NTU. No MCLs or treatment techniques were exceeded by BMA in 2010.
- Manganese is regulated by a secondary maximum contaminant level (MCL), a standard which was established to address issues of aesthetics (discoloration), not health concerns.

### Know the Health Effects:

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. Contaminants that may be present in source water include microbes, organic and inorganic chemicals, or radioactive materials.

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. 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 establish limits for contaminants in bottled water which must provide the same protection for public health. 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.

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. The Borough of Birdsboro 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>.

The Authority is concerned with protecting its water sources. Current treatment processes ensure that raw water from the Authority's reservoirs and creek intake becomes finished water that meets all Federal and State drinking water standards. A copy of the Source Water Assessment Report is available from the Authority for review.

MCLs are set at very stringent levels for health effects. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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