

Sources of Water

We supply water to you from several sources, including nine deep wells (six in Upper Dublin, one in Lower Gwynedd and two in Ambler Borough) and one quarry (spring) well (located in Whitmarsh Township). These sources supplied an average of 1.63 million gallons of water per day in 2011. All sources are considered groundwater sources, except the spring well which is classified as a surface water source. All sources are located within the service area of the Ambler Borough Water Department, which includes Ambler Borough and portions of the Townships of Lower Gwynedd, Upper Dublin, Whitmarsh and Whitpain. The system is currently divided into three service areas, and is served by the supply sources, storage facilities and booster pumping stations. We also have interconnections with North Wales Water Authority and Aqua Pennsylvania as reserve, in case of an emergency.

Source Water Assessment Statement

A *Source Water Assessment* of our sources was completed by the PA Department of Environmental Protection (Pa. DEP) in April, 2002. The sources of water for the Ambler Borough water system include nine groundwater supply wells located in the Ambler area, and a surface water source (the Spring Well). The Spring Well is at moderate risk for some upstream contaminants. When used in past years, water withdrawn from that source was adequately treated to ensure the quality of customers' tap water. All source water is treated, and meets state and federal requirements for quality and safety, before being distributed to the public. For information about the Source Water Assessment, please contact the Ambler Borough Water Department at (215) 646-1000.

Potential Contaminants

Drinking water, including bottled water, may reasonably be expected to contain at least a small amount 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 (EPA's) *Safe Drinking Water Hotline* (800) 426-4791 or by visiting the EPA's drinking water website www.epa.gov/safewater.

The raw water sources of drinking water (both tap 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:

- *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 stormwater 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, stormwater runoff and residential users.
- *Organic chemical contaminants*, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- *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 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.

Additional Information

Water samples from the Spring Well were tested for total organic carbon periodically throughout 2011. Results range from less than 1.0 mg/L to 1.5 mg/L.

The Ambler Borough Water Department met all requirements under the Lead and Copper Rule. We sampled water at thirty one homes in August and September 2011. Regulations state that ninety (90) percent of samples taken must be below the Action Levels of 15 ppb for lead and 1.3 ppm for copper. The 90th percentile level, in our water, for lead was 3.90 ppb and the 90th percentile level for copper was 0.42 ppm. There was one sample taken that exceeded the Action Level for lead and there were no samples that exceeded the Action Level for copper.

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. Ambler Borough Water Department 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>.

Nitrate as nitrogen 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. As a precaution we always notify physicians and health care providers in the area if there is ever a higher than normal nitrate level in the water supply. If you are caring for an infant, you should ask advice from your health care provider.

We test the hardness of our wells on an annual basis. Total Hardness ranged from 11.6 to 17.5 grains per gallon (gpg) in 2011.

We do not add fluoride to our water supply.

In the event that you experience discolored water due to a fire hydrant being opened or a water main break the following is recommended. Do not open the hot water side of your faucet, as you will bring the discolored water into the hot water tank. Run the cold water side of your faucet only for several minutes. Continue to repeat this process until the water is clear. If the problem persists, contact the Borough office at 215-646-1000.

Ambler Borough Water Department
122 East Butler Avenue
Ambler, PA 19002

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2011 Annual Drinking Water Quality Report Ambler Borough Water Department, PWSID 1460020

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien. This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Water System Information

We are pleased to present to you our 2011 Annual Drinking Water Quality Report. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual water quality report to customers in addition to other notices that may be required by law. This report is designed to inform you about the quality of the water we deliver to you everyday. The Ambler Borough Water Department is committed to providing you with a safe and reliable water supply. This report details where our water comes from, what constituents it contains, and the risks our water testing and treatment are designed to prevent. Informed consumers are our best allies in maintaining safe drinking water.

If you have any questions about this report, please contact Phil Benigno at the Ambler Borough Water Department at (215) 646-1000. Normal business hours are Monday through Friday, 8:00 am to 4:30 pm. If you are interested in learning more about the Ambler Borough water system, you are welcome to attend Ambler Borough's regularly scheduled public meetings held the first and third Tuesday of each month at Borough Hall starting at 7:00 pm., or visit our website at <http://www.boroughofambler.com>. We take great pride in supplying good quality drinking water to our customers at a reasonable price.

Water Quality Monitoring

The Ambler Borough Water Department routinely monitors for constituents in drinking water in accordance with federal and state laws. The Detected Contaminants table lists only the drinking water contaminants we detected that are applicable for the 2011 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. All drinking water may be reasonably expected to contain at least small amounts of some constituents.

Unless otherwise noted, the table shows monitoring results for the period of January 1 to December 31, 2011. The state requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

Water Quality Table Definitions

The following definitions will help you understand the key terms and abbreviations contained in the Detected Contaminants table.

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

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 a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant 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 contamination.

Not Applicable (N/A) – Does not apply.

Nephelometric Turbidity Unit (NTU) – Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Non-Detects (ND) – Laboratory analysis indicates that the constituent is not present.

Parts Per Million (ppm) or Milligrams Per Liter (mg/L) – One part per million corresponds to one minute in two years or a single penny in \$10,000. 1 ppm = 1,000 ppb.

Parts Per Billion (ppb) or Micrograms Per Liter (µg/L) – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000. 1,000 ppb = 1 ppm.

Pico Curies Per Liter (pCi/L) – A measure of radioactivity.

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

Unregulated Contaminant Monitoring

To ensure the highest level of water quality for our customers, we have performed monitoring of unregulated contaminants as required by EPA. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in the drinking water and whether future regulation is warranted.

Vulnerability

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 from the *Safe Drinking Water Hotline* at (800) 426-4791 or on-line at www.epa.gov/safewater.

Detected Contaminants

Microbial Contaminants	MCL	MCLG	Highest Result	Range of Detections	Violation	Typical Source of Contaminant
Total Coliform Bacteria	1 positive monthly sample	0 positive monthly samples	ND	N/A	No	Naturally present in the environment.
Inorganic Contaminants	MCL	MCLG	Highest Result	Range of Detections	Violation	Typical Source of Contaminant
Barium (ppm)	2.00	2.00	0.04	0.04 – 0.04	No	Erosion of natural deposits; discharges from metal refineries; discharge of drilling wastes.
Chromium (ppb)(2006 Data)	100	100	4.60	4.60 – 4.60	No	Discharge from steel and pulp mills; erosion of natural deposits.
Nitrate (ppm)	10.0	10.0	4.06	0.53 – 4.06	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Entry Point Disinfectant Residual	Lowest Result	MRDLG	Min. Disinfectant Residual	Range of Detections	Violation	Typical Source of Contaminant
Chlorine Residual (ppm)	0.4	N/A	0.4	0.4-2.48	No	Water additive used to control microbes.
Lead and Copper	Action Limit	MCLG	90 th Percentile Value	Number of Sites above the AL	Violation	Typical Source of Contaminant
Copper (ppm)(2010 Data)	1.30	1.30	0.42	0	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (ppb)(2010 Data)	15.0	15.0	3.9	1	No	Corrosion of household plumbing systems; erosion of natural deposits.
Volatile Organic Contaminants	MCL	MCLG	Highest Result	Range of Detections	Violation	Typical Source of Contaminant
1-1-Dichloroethylene (ppb)	7.00	7.00	0.67	ND – 0.67	No	Discharge from industrial chemical factories.
Toluene (ppm)(2010 Data)	1.00	1.00	0.001	ND- 0.001	No	Discharge from petroleum factories.
Disinfectants / Disinfection Byproducts	MCL or MRDL	MCLG or MRDLG	Highest Result	Range of Detections	Violation	Typical Source of Contaminant
Total Trihalomethanes (ppb)	80.0	N/A	11.11 ⁽¹⁾	2.20 – 22.00	No	Byproduct of drinking water chlorination.
Haloacetic Acids (ppb)	60.0	N/A	5.05 ⁽¹⁾	1.00 – 11.3	No	Byproduct of drinking water chlorination.
Distribution Chlorine Residual (ppm)	4.00	4.00	0.92 ⁽²⁾	0.70 ⁽²⁾ – 0.92 ⁽²⁾	No	Water additive used to control microbes.
Clarity Characteristics	Level Found	Range of Detections	MCL	MCLG	Violation	Typical Source of Contaminant
Turbidity (NTU)	0.09	0.02 – 0.09	TT=1 (single measurement)	0	No	Soil runoff, river sediment
	100% (samples ≤ 0.30)	N/A	TT=95% (samples ≤ 0.30)		No	

- (1) Running annual average value
- (2) Monthly average results

PUBLIC NOTIFICATION RULE

Public Notification Rule requires us to notify you within 24 hours, in the event of a Tier 1 violation. In order for us to contact you, if you have not done so already, please contact the Borough and provide a current phone and Email address. Forms are on our website <http://www.boroughofambler.com>. You may call in your information at 215-646-1000 Ext 113 or 111 or may Email us at erussell@borough.ambler.pa.us.

Although our monitoring and testing indicates that some constituents have been detected, the water has met all state and federal requirements. However, in October 2011 we had seven monitoring/reporting violations because we failed to provide and test for radiological contaminants at Entry Points 101, 103, 105, 106, 107, 108 and 110. The samples were collected in February 2012 and met the limits; there were no water quality violations. Public notification was not required by DEP. As you can see from the Detected Contaminants table, our system had no water quality violations in 2011.