Ambler Borough Water Department 122 East Butler Avenue Ambler, PA 19002 PRSRT STD U.S. Postage Paid Harrisburg, PA Permit No. 1182

2005 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 2005 Annual Drinking Water Quality Report. The Safe Drinking Water Act (SWDA) 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 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 our regularly scheduled public meetings held the first and third Monday of each month at Borough Hall starting at 7:30 pm and 8:00 pm, respectively. We take great pride in supplying good quality drinking water to our customers at a reasonable price.

Sources of Water

We supply water to you from several sources, including nine deep wells and one quarry spring well. These sources supplied an average of 1.77 million gallons of water per day in 2005. All sources are considered groundwater sources, except the spring well which is classified as a surface water source. The spring well was not used in 2005. 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, Whitemarsh, and Whitpain. The system is currently divided into three service areas, served by the supply sources, storage facilities, and/or booster pumping stations.

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 Safe Drinking Water Hotline (800-426-4791) or online at <u>www.epa.gov/OGWDW</u>.

The 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.

Vulnerability

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 (800-426-4791) or online at <u>www.epa.gov/OGWDW</u>.

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 2005 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, 2005. 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 which 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 (\mu g/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.

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	0 positive samples	N/A	NO	Naturally present in the environment.
Total Organic Carbon (ppm)	TT < 2.0	N/A	1.6	ND – 1.6	NO	Naturally present in the environment.
Inorganic Contaminants	MCL	MCLG	Highest Result	Range of Detections	Violation	Typical Source of Contaminant
Barium (ppm) ⁽¹⁾	2	2	0.31	0.076 - 0.31	NO	Erosion of natural deposits
Chromium (ppb) ⁽¹⁾	100	100	4.8	ND - 4.8	NO	Discharge from steel and pulp mills; erosion of natural results.
Fluoride (ppm) ⁽¹⁾	2	2	0.16	ND – 0.16	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (ppm)	10	10	3.29	0.18 - 3.29	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Lead and Copper	Action Limit	MCLG	90 th Percentile value	Number of sites above the AL	Violation	Typical Source of Contaminant
Copper (ppm) (2003 Data)	1.3	1.3	0.74	0	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (ppb) (2003 Data)	15	0	4	0	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	7	$0.8^{(4)}$	ND – 0.9	NO	Discharge from industrial chemical factories.
Trichloroethylene (ppb)	5	0	0.3 ⁽⁴⁾	ND – 0.51	NO	Discharge from metal degreasing sites and other factories.
Xylenes (ppm)	10	10	$0.0005^{(4)}$	ND - 0.002	NO	Discharge from petroleum factories; discharge from chemical factories.
Radioactive Contaminants	MCL	MCLG	Highest Result	Range of Detections	Violation	Typical Source of Contaminant
Gross Alpha (pCi/L) (2003 Data)	15	0	6.93	1.64 - 6.93	NO	Erosion of natural deposits.
Combined Radium, 226 & 228 (pCi/L) (2003 Data)	5	0	2.51	1.05 - 2.51	NO	Erosion of natural deposits.
Gross Beta Particle Activity (pCi/L) (2003 Data)	50 ⁽²⁾	0	3.90	1.15 - 3.90	NO	Decay of natural and man-made deposits
Uranium (µg/L) (2003 Data)	30	0	9.61	0.52 - 9.61	NO	Erosion of natural deposits.
Disinfectants / Disinfection Byproducts	MCL or MRDL	MCLG or MRDLG	Highest Result	Range of Detections	Violation	Typical Source of Contaminant
Chlorine Residual (ppm)	4	4	0.45 ⁽³⁾	0.36 - 0.45 ⁽³⁾	NO	Water additive used to control microbes.
Total Trihalomethanes (ppb)	80	N/A	7.1 ⁽⁴⁾	1.7 – 13.5	NO	Byproduct of drinking water chlorination.
Haloacetic Acids (ppb)	60	N/A	1.6 ⁽⁴⁾	1.0 - 3.3	NO	Byproduct of drinking water chlorination.
Unregulated Contaminants	MCL	MCLG	Highest Result	Range of Detections	Violation	Typical Source of Contaminant
Nickel (ppm) ⁽¹⁾	N/A	N/A	0.004	ND - 0.004	NO	Erosion of natural deposits.

(1) Inorganic samples for 2004 were collected late (January 2005) at Well 11. Data from all other locations is from 2004.

(2) EPA considers 50 pCi/L to be the level of concern for beta particles.

(3) Monthly average values.

(4) Running annual average values.