



## Undetected Contaminants Tested for by Lyons Borough Municipal Authority

The Lyons Borough Municipal Authority takes great pride in supplying you, the customer, with a safe and dependable water supply, but we are not just satisfied with good test results. We strive to deliver reliable service to you our customers. The Authority provides a practical knowledge of the system and of the water industry in general, which enables us to answer most any question you may have concerning the operation of your "Hometown Water System."

We at the Authority aim to deliver safe drinking water to you and your families and continue to be alert to possible hazards or problems, which could present problems in the future.

If you have any questions about this report or concerning your water utility, please contact Lyons Borough Municipal Authority at 610-682-0305. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled monthly meetings. They are held on the second Monday of each month at 7:00 p.m. at the Lyons Borough Hall, 316 South Kemp Street.

**Lyons Borough Municipal Authority**  
316 South Kemp Street, P.O. Box 131  
Lyon Station PA 19536-0131  
(610) 682-0305

### Inorganic Chemicals

Antimony (2006)  
Arsenic  
Beryllium (2003)  
Cadmium (2003)  
*Chloride (2001)*  
Chromium (2003)  
Cyanide (Free, 2003)  
Iron (2001)  
Mercury (2003)  
Nickel (2003)  
Nitrite (2001)  
Selenium (2003)  
Thallium (2003)  
*Zinc (2003)*

### Microbiological

Contaminants  
Total Coliforms (2006)

### Synthetic Organic

Chemicals (2006)  
Alachlor  
Atrazine  
Lindane  
Methoxychlor  
Simazine

Volatile Organic  
Chemicals (2006)  
1,1,1-Trichloroethane  
1,1,2-Trichloroethane  
1,1-Dichloroethylene  
1,2,4-Trichlorobenzene  
1,2-Dichloroethane  
1,2-Dichloropropane  
Benzene  
Carbon tetrachloride  
Chlorobenzene  
cis-1,2-Dichloroethylene  
Dichloromethane  
Ethylbenzene  
o-Dichlorobenzene  
Para-Dichlorobenzene  
Styrene  
Tetrachloroethylene  
Toluene  
trans-1,2-  
Dichloroethylene  
Trichloroethylene  
Vinyl chloride  
Xylenes (Total)

### Disinfection By-

**Products**  
HAA5\*\*  
TTHM\*\*

### Notes:

Contaminants in italics not regulated by EPA.  
Not all items are required to be sampled every year according to DEP regulations.

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



FOR THE YEAR 2007

**Lyons Borough Municipal Authority**

# Annual Drinking Water Quality Report

**Public Water Supply Identification (PWSID)  
Number 3060096**

We're pleased to present to you the 2007 *Annual Drinking Water Quality Report* (also Consumer Confidence Report). This report is designed to inform you about the water quality 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 maintain and improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water sources are two wells. Currently, two springs are not being utilized. The Authority also maintains a 150,000 gallon storage tank in the event of water emergencies or droughts. These sources supply slightly over 200 connections. The Authority currently provides water to portions of both Lyons Borough and Maxatawny Township.

**Lyons Borough Municipal Authority**  
316 South Kemp Street, P.O. Box 131  
Lyon Station, PA 19536-0131

## What does this mean?

We have learned through our monitoring and testing that some constituents have been detected. This table shows the results of our monitoring for 2007. As you can see by the table, although trace elements and compounds were present, our system had no MCL violations.

The Authority routinely monitors for impurities in your drinking water according to federal and state laws. We are required to monitor your drinking water for specific contaminants on a regular basis and report the results to the Department of Environmental Protection (DEP) by the 10th of the following month. We were required to sample for Haloacetic Acids and Total Trihalomethanes by 07/2007. These samples were not taken until 11/2007, which was late for DEP Reporting Requirements.

## Definitions:

*In these tables you will find some terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:*

**AL - Action Level:** the concentration of 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 or Parts per million (ppm)** - 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.

## Contaminants Detected by Lyons Borough Municipal Authority

Substance*	Highest Level Detected Level		LBMA Detection Range	LBMA Detection Allowed (MCL)			EPA MCLG (EPA Goal)		Sources of Contaminant	Violation Y / N ?
<b>Inorganic Contaminants</b>										
Calcium (7/2005)	42.1	mg/l	36.3- 42.1	ug/l	N/A	mg/l	N/A	mg/l	Found mostly in soil system such as limestone	N
Total Alkalinity (7/2005)	150	mg/l	150 <sup>†</sup>	mg/l	N/A	mg/l	N/A	mg/l	Naturally occurring soluble mineral salts	N
Fluoride (4/2003)	0.1	mg/l	0.1	mg/l	2	mg/l	4	mg/l	Natural deposits, fertilizers and aluminum factories	N
Barium (4/2003)	0.146	mg/l	0.146	mg/l	2	mg/l	2	mg/l	Metal Refineries, drilling wastes, natural deposits	N
Nitrate	2.6	mg/l	2.6	mg/l	10	mg/l	10	mg/l	Geology, farmland runoff, septic tanks, sewage	N
<b>Radioactive Contaminants</b>										
Gross Alpha (7/2003)	3.56	pCi/l	3.56 <sup>†</sup>	pCi/l	15	pCi/l	0	pCi/l	Erosion of natural deposits	N
Radium 226&228 (7/2003)	0.52	pCi/l	0.42 - 0.52	pCi/l	5	pCi/l	0	pCi/l	Erosion of natural deposits	N
*Combined Uranium (7/2003)	1.59	pCi/l	1.59 <sup>†</sup>	pCi/l	30	pCi/l	0	pCi/l	Erosion of natural deposits	N
<b>Disinfection Byproducts</b>										
Chlorine	1.16	mg/l	ND-1.16	mg/l	MRDL=4	mg/l	MRDLG=4	mg/l	Water additive used to control microbes	N
Haloacetic Acids (HAAC)	0	ug/l	0	ug/l	60	ug/l	60	ug/l	Byproduct of disinfection	N
Total Trihalomethanes (TTHM)	0	ug/l	0	ug/l	80	ug/l	80	ug/l	Byproduct of disinfection	N
Substance	LBMA Range of Detected Values		90th Percentile	Action Level	EPA MCLG	# of Sites above Action Level of Total Sites		Sources of Contaminant		Violation Y / N ?
<b>Lead and Copper Rule<sup>‡</sup></b>										
Copper (mg/L)	0.033 - 0.296		0.142	1.3	1.3	0 of 10		Corrosion of pipes, geology, wood preservatives		N
Lead (ug/l)	ND-6.4		2	15	0	0 of 10		Corrosion of old pipes, geology		N

### Notes:

\* The PA DEP allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Items not sampled for in 2007 are noted with the last year of sampling.

<sup>†</sup> Only one sample was collected.

<sup>‡</sup> The action level for Lead is 15 µg/l, and the action level for Copper is 1.3 mg/l. No Lead and Copper samples taken were above the required Action Level (AL) shown above. \*\* Violation – Failed to collect samples by 07/2007; samples were collected 11/2007 which resulted in late reporting to PA DEP

**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.

**ND - Non-Detects** - laboratory analysis indicates that the contaminant is not present at a detectable level.

**pCi/l - Picocuries per liter** - picocuries per liter is a measure of the radioactivity in water.

**ug/l - Micrograms per liter or Parts per billion (ppb)** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

## Know The Health Risks:

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, pesticides and herbicides, 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, The Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The 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.

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 and Prevention (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.

MCL's 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.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.