



## Undetected Contaminants Tested for by Lyons Borough Municipal Authority

### Inorganic Chemicals

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

### Volatile Organic Chemicals

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  
Monochlorobenzene

o-Dichlorobenzene  
Para-Dichlorobenzene  
Styrene  
Tetrachloroethylene  
Toluene  
trans-1,2-  
Dichloroethylene  
Trichloroethylene  
Vinyl chloride  
Xylenes (Total)

### Synthetic Organic Chemicals

Alachlor  
Atrazine  
Lindane  
Methoxychlor  
Simazine

### Notes:

Contaminants in *italics*  
not regulated by EPA.

Not all items are required  
to be sampled every year  
according to DEP  
regulations. Items whose  
most recent sampling  
was not made in 2004  
are shown with the most  
recent year of sampling.

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

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



FOR THE YEAR 2004

**Lyons Borough Municipal Authority**

# Annual Drinking Water Quality Report

We're pleased to present to you the year 2004  
*Annual Drinking Water Quality 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 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 and two springs  
that are currently 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  
(610) 682-4730

## 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 2004. As you can see by the table, although trace elements and compounds were present, our system had no MCL violations.

DEP requires us to notify you, the consumer, of any other violations. In 2004, we did have a paperwork violation for not notifying DEP that our 2003 Consumer Confidence Reports were distributed to all customers. The CCR's were distributed to all customers by the July 1, 2004 date as required by DEP however we did not notify DEP that these reports were distributed. This was strictly a clerical error and did not affect the quality or quantity of water we provide to you, our valued customer.

### Definitions:

*In the table 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:*

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

**Maximum Contaminant Level** - The "Maximum Allowed" (MCL) 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.

**Maximum Contaminant Level Goal** - The Goal (MCLG) 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.

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

**Milligrams per liter (mg/l) or Parts per million (ppm)** - one milligram per liter corresponds to one minute in two years or a single penny in \$10,000.

## 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>						
Copper	0.43 mg/l	0.051 - 0.43 mg/l	1.3 mg/l	0 mg/l	Corrosion of pipes, geology, wood preservatives	N
Lead	15 ug/l	<1 - 15 ug/l	15 ug/l	0 ug/l	Corrosion of old pipes, geology	N
Fluoride	0.1 mg/l	0.1 mg/l	4 mg/l	4 mg/l	Natural deposits, fertilizers and aluminum factories	N
Barium	0.146 mg/l	0.146 mg/l	2 mg/l	2 mg/l	Metal Refineries, drilling wastes, natural deposits	N
Nitrate	4.7 mg/l	3.2 - 4.7 mg/l	10 mg/l	10 mg/l	Geology, farmland runoff, septic tanks, sewage	N
<b>Radioactive Contaminants</b>						
Gross Alpha	3.56 pCi/l	3.56 pCi/l	15 pCi/l	0 pCi/l	Erosion of natural deposits	N
Radium (226&228)	1.59 pCi/l	0.94 pCi/l	5 pCi/l	0 pCi/l	Erosion of natural deposits	N
Uranium	0.94 pCi/l	1.59 pCi/l	30 pCi/l	0 pCi/l	Erosion of natural deposits	N
<b>Disinfection Byproducts</b>						
Haloacetic Acids (HAAS)*	0.001 mg/l	0.001 mg/l	0.06 mg/l	0.06 mg/l	Byproduct of disinfection	N
Total Trihalomethanes (TTHM)*	0.0034 mg/l	0.0034 mg/l	0.08 mg/l	0.08 mg/l	Byproduct of disinfection	N

Note: Not all contaminants are sampled every year, according to DEP regulations. The year of most recent sampling is given for each of the contaminants listed above.

\* Only one sample was collected.

\*\* The highest detected level of Lead was a 90th percentile value. The action level for Lead and Copper serves as a trigger for water systems to take additional 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.

### Definitions: (Continued)

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

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

### Know The Health Effects:

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 human activity.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents can be microbes, organic or 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. 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.

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

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/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 1-800-426-4791.

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.

Lead in drinking water at levels above the action level is a health risk. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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.