

Lyons Borough Municipal Authority PWSID #3060096

Annual Drinking Water Quality Report

Water Testing Performed in 2016

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.

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 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 run-off, 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, urban stormwater run-off and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater run-off 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 assure that tap water is safe to drink, EPA and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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* (800-426-4791).

Information about Lead

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. Lyons Borough Municipal Authority 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>.

Important Health Information:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as person 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 health care providers. EPA/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 (1-800-426-4791).

2016 Annual Drinking Water Quality Report of the Lyons Borough Municipal Authority

We are pleased to present to you this year's Annual Drinking Water Quality Report. We routinely monitor for constituents in your drinking water according to Federal and State Laws. The table shows the results of this monitoring for the period of January 1st to December 31st, 2016. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Water Drinking Act. The date has been noted on the sampling results table. Our water sources are two ground wells located within the municipality.

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 quality. If you want to learn more, please attend our regularly scheduled monthly meetings. They are held on the second Monday of every month at 7:00 P.M.

CONTAMINANT (unit of measurement)	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Sample Date	Violation Y/N	Sources of Contamination
Chemical Contaminants							
Chlorine (ppm)	MRDL =4	MRDLG =4	0.67	0.67-2.20	2016	N	Water additive used to control microbes
Fluoride (ppm)	2*	2	0	n/a	09/2015	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppb)	10	10	3.86-4.00	3.86-4.00	03/17/2016 04/06/2016	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Haloacetic Acids (HAA5) (ppb)	60	n/a	1.13	n/a	9/2016	N	Byproduct of drinking water disinfection.
Total Trihalomethanes (TTHMs) (ppb)	80	n/a	5.4	n/a	9/2016	N	Byproduct of drinking water disinfection.
Alpha Emitters (pCi/L)	15	0	0.625	n/a	09/2015	N	Erosion of natural deposits
Barium (ppm)	2	2	0.123	n/a	09/2015	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	1.0	n/a	09/2015	N	Discharge from steel and pulp mills; Erosion of natural deposits
Selenium (ppb)	50	50	5.0	n/a	09/2015	N	Discharge from petroleum and metal refineries; Erosion of natural deposits, Discharge from mines

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Sample Date	Violation Y/N	Sources of Contamination	
Chlorine (ppm)	0.40	0.67	0.67-2.20	2016	N	Water additive used to control microbes.	

Lead and Copper							
Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	# of Sites above AL of Total Sites	Sample Date	Violation Y/N	Sources of Contamination
Copper* (ppm)	1.3	1.3	0.097	0 out of 5	2016	N	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives
Lead* (ppb)	15		3.5	0 out of 5	2016	N	Corrosion of household plumbing ; Erosion of natural deposits

Microbial							
Contaminants	MCL	MCLG	Highest # or % of Positive Samples	Violation Y/N	Sources of Contamination		
Total Coliform Bacteria	For systems that collect < 40 samples/month: •More than 1 positive monthly sample	0	0	N	Naturally present in the environment.		
Fecal Coliform Bacteria or <i>E. coli</i>	0	0	0	N	Human and animal fecal waste.		

Public Notice – LBMA did not collect a daily sample January 23, 2016 due to inclement weather and road closures preventing access to the plant. This is a Tier III violation. The water system results for January 22 and January 24 were in compliance and there were no equipment problems January 23. We feel the water quality was not affected by this event. A tier III violation is for failure to monitor as required by permit.

What's In My Water?

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

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 contaminants.

Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.

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

Mrem/year = millirems per year (a measure of radiation absorbed by the body)

pCi/L = picocuries per liter (a measure of radioactivity)

ppb = parts per billion, or micrograms per liter ($\mu\text{g/L}$)

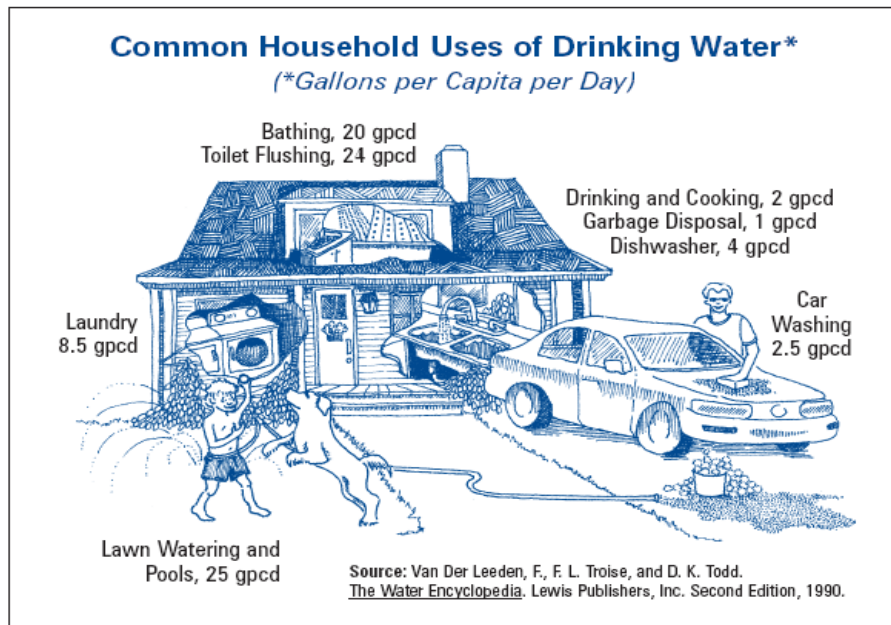
ppm = parts per million, or milligrams per liter (mg/L)

ppq = parts per quadrillion, or picograms per liter

ppt = parts per trillion, or nanograms per liter

How Do We Use Drinking Water In Our Homes?

We take our drinking water supplies for granted; yet they are limited. Only one percent of all the world's water can be used for drinking. Nearly 97% of the world's water is salty or otherwise undrinkable, and the other two percent is locked away in ice caps and glaciers. There is no "new" water: whether our source water is a stream, river, lake, spring, or well, we are using the same water the dinosaurs used millions of years ago.



The average American uses about 90 gallons of water each day in the home, and each American household uses approximately 107,000 gallons of water each year. For the most part, we use water treated to meet drinking water standards to flush toilets, water lawns, and wash dishes, clothes, and cars. In fact, 50-70% of home water is used for watering lawns and gardens. Nearly 14% of the water a typical homeowner pays for is never even used – it leaks down the drain.*