

2011 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 3060096 NAME: Lyons Borough Municipal Authority

*Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.* (This report contains very important information about your drinking water. Translate it, or speak with someone who understands it.)

**WATER SYSTEM INFORMATION:**

This report shows our water quality and what it means. 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 you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Monday of each month at 7:00 PM.

**SOURCE(S) OF WATER:**

Our water sources are two ground water wells located within the Municipality.

A Source Water Assessment of our source(s) was completed in 2007 by the PA Department of Environmental Protection (PADEP). The Assessment has found that our source(s) is/are potentially most susceptible to [(activities) ex. road deicing materials, accidental spills along roads and leaks in underground storage tanks]. Overall, our source(s) has/have [little, moderate, high] risk of significant contamination. Summary reports of the Assessment are available by writing to Lyons Borough Municipal Authority at P. O. Box 131, Lyons Station, Pa. 19536-0131 and will be available on the PADEP website at [www.dep.state.pa.us](http://www.dep.state.pa.us) (directLINK "source water"). Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the PADEP Southeast Regional Office, Records Management Unit at (484) 250-5900.

**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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).**

**MONITORING YOUR WATER:**

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2011. 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 Drinking Water Act. The date has been noted on the sampling results table.

**DEFINITIONS AND ABBREVIATIONS:**

**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.

**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 (µg/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

**DETECTED SAMPLE RESULTS:**

Chemical Contaminant	MCL in CCR units	MCLG	Highest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Nitrate (ppm)	10	10	5.07	4.3 – 5.07	ppm	Quarterly	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Atrazine (ppb)	3	3	0.21	0 – 0.21	ppb	Quarterly	N	Runoff from herbicide used on row crops
Lead (ppb)	AL= 15	0	8.5	0 – 8.5	ppb	2010	N	Corrosion of household plumbing systems; Erosion of natural deposits

Copper (ppm)	AL- 1.3	1.3	0.22	0.085 – 0.22	ppm	2010	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
TTHMs [Total trihalomethanes] (ppb)	80	N/A	3.5	3.5	ppb	2nd Quarter	N	By-product of drinking water chlorination
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.02	0.49 – 1.02	ppm	Monthly	N	Water additive used to control microbes

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.40	0.30	0.30 – 1.42	ppm	Daily	Y	Water additive used to control microbes.

Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of TT Y/N	Sources of Contamination
Lead	15	0	0.202	ppb	0	N	Corrosion of household plumbing.
Copper	1.3	1.3	5.1	ppm	0	M	Corrosion of household Plumbing.

**Special Educational Statement for Nitrate, Arsenic, and Lead:**

Nitrate, lead and arsenic also require special educational language if your detected value is above certain levels but below the MCL or AL.

If your water contains:

- **Nitrate** above 5 ppm (50 % of the MCL), but below 10 ppm (the MCL),

you must include in your report the relevant special educational statement listed below about that contaminant.

**Nitrate:** Nitrate 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. If you are caring for an infant, you should ask for advice from your health care provider.

Note: Beginning in the report due by July 1, 2002, and ending January 22, 2006, a community water system that detects arsenic above 10 ppb and up to and including 50 ppb must include the arsenic health effects language.

Lead: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

**OTHER VIOLATIONS:** In March 2011 we had a failure to monitor the Entry Point Chlorine Residual.

**EDUCATIONAL INFORMATION:**

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:

- 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 runoff, 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 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 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 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).

**OTHER INFORMATION:**

The Authority is changing our disinfection process from Gas Chlorine the liquid Sodium Hypochlorite.