

2017

City of Lowell

Year Annual Drinking Water Quality Report for

PWS ID # 01-36-060

We at the City of Lowell are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about from where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. 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 and to providing you with this information, because informed customers are our best allies.

What EPA Wants You to Know

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).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 has set forth the appropriate guidelines to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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; contaminants such as salts and metals, which can be naturally-occurring or result from urban storm water 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, urban storm water runoff, and residential uses; 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 storm water runoff, and septic systems; and 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

When You Turn on Your Tap, Consider the Source;

The City of Lowell purchases all water from the City of Gastonia. The City of Gastonia is supplied by surface water from Mountain Island Lake, located off N.C. Hwy.273 in northeastern Gaston County near Mt Holly N.C. All water treatment is done by the City of Gastonia and distributed by the City of Lowell.

We routinely monitor for over 120 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31 last year. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

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 drinking water and whether future regulation is warranted.

Important Drinking Water Definitions

Not-Applicable (N/A) — Information not applicable/not required for that particular water system or for that particular Rule.

Non-Detects (ND) laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.

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.

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

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

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

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level (AL) -the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Maximum Residual Disinfection Level Goal The "Level" (JVIRDLG) 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.

Maximum Residual Disinfection Level — the "Highest Level" (MRDL) of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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.

The City of Lowell had no contaminant violations in 2017.

The City of Lowell had no variances or exemptions in 2017.

The City of Lowell had no monitoring violations in 2017.

The City of Gastonia had no contaminant violations in 2017.

The City of Gastonia had no variances or exemptions in 2017.

Volatiles Organic Contaminants

TTHM	MCL Violations	Our Water	MCL limit	Range	Likely Source
Total Trihalomethanes	NO	.040	.080	.024 -.065	By-Product of drinking water disinfection.
HAA5 Haloacetic Acids	NO	.026	.060	.015-.044	By-Product of drinking water disinfection.

Inorganic Contaminants	Sample date	Results	Violation	Range	MCL/MCLG	Likely source
Fluoride (ppm)	1 st Quarter	ND	NO	N/A	4/4	Erosion of natural deposits; Water additive which support strong teeth; discharge from fertilizer and aluminum factories.
Turbidity		0.551*NTU	NO	MCL TT=1	N/A	Soil Runoff
Disinfection By-Product Contaminants						
Contaminant (units)	Our Water (avg)	Violation	Range	MCL/MCLG	Likely Source	
Chlorine (ppm)	0.195	NO		MRDL-4/MRDLG-4	Water additive used to control microbes.	
Disinfection By-Product Precursors Contaminants						
Contaminant (units)	Sample date	Results	Violation	Range	MCL/MCLG	Likely source
Total Organic Carbon(ppm)						
(TOC)-Treated	2017	29.2	NO	21.2-40.2	NA/TT	Naturally present in the environment

Depending on the TOC in our source water, the system must have a certain % removal of TOC or must achieve alternative compliance criteria.

Lead and Copper contaminants						
Contaminants (units)	Sample Date	Results	Violation	Range	MCL/MCLG	Likely source
Copper (ppm)	6/15/2016	.026	NO	.014-.045	AL-1.3/1.3	Corrosion of household plumbing systems Erosion of natural deposits.
Lead (ppm)	6/15/2016	0.001	NO	0.00-0.0024	AL-15/0	

Footnotes:

1. Copper and Lead are in the 90th percentile for samples collected.
2. Our source for fluoride has been tested, and meets all state standards.
3. We met the turbidity standards 100% of the year.
4. This represents a four quarter running average.

Although we ran many tests, only the listed substances were found. They were below the state EPA limits.

A very small percentage of water is available to the population for drinking, cooking and other uses.

Please help to conserve water.

If you have any questions concerning this report, please contact city hall at 704-824-3518.