

City of Smyrna

2017 Annual Water Quality Report

Water System ID #0670007

The City of Smyrna is committed to delivering safe water that meets or exceeds federal and state quality standards. This edition covers all testing completed from January 1 through December 31, 2017.

The City of Smyrna purchases water from the Cobb County – Marietta Water Authority (CCMWA) established by the State to provide reliable and safe public water to Cobb County and its wholesale customers. This is an annual report on the quality of water delivered by the CCMWA and contains information on the source of our water, its constituents and the health risks associated with any contaminants. We are once again proud to present to you our annual water quality report and want you to know that your drinking water is safe. If you have any questions regarding this report, please contact the City of Smyrna Utilities Department at 678-631-5338.



WATER SOURCE

Cobb County – Marietta Water Authority has two surface water sources supplying two treatment facilities. The Wyckoff Treatment Division is supplied from Allatoona Lake, a Corps of Engineers impoundment in north Cobb, south Cherokee and south Bartow counties. The Quarles Treatment Division receives water from the Chattahoochee River.

The Cobb County – Marietta Water Authority and the Atlanta Regional Commission completed a source water assessment itemizing potential sources of water pollution to our surface drinking water supplies. This information can help you understand the potential for contamination of your drinking water supplies and can be used to prioritize the need for protecting drinking water sources.

A Source Water Assessment is a study and report which provides the following information:

- Delineating the water supply watershed for each

drinking water intake,

- Developing an inventory of potential sources of contamination
- Determining the susceptibility of drinking water sources to identified potential sources of contamination, and
- Increasing public involvement in and awareness of drinking water watershed concerns.

For more information on this project visit the Source Water Assessment website at <http://www.atlantaregional.org> or you can request information by mail from the Atlanta Regional Commission:

Attn: Source Water Assessment
Environmental Planning Division
Atlanta Regional Commission
229 Peachtree Street, NE
International Tower Suite 100
Atlanta, GA 30303

An explanation of the Water Quality Data Table

The tables show the results of our water quality analyses. Every contaminant regulated by the Environmental Protection Agency (EPA) that was detected in the water, even at trace levels, is listed here. The tables contain the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the usual sources of such contamination, footnotes explaining our finding, and a key to units of measurement. Definitions of MCL, MCLG, AL, and TT are provided:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must implement.

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

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 microbiological 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

The data presented in this report are from the most recent testing done in accordance with regulations.

KEY TO TABLE

AL – Action Level	ppm – parts per million or milligrams per liter (mg/L)
MCL – Maximum Contaminant Level	ppb – parts per billion or micrograms per liter (µg/L)
MCLG – Maximum Contaminant Level Goal	TT – Treatment Technique
NTU – Nephelometric Turbidity Unit	n/a – not applicable
MRDL – Maximum Residual Disinfectant Level	n/d – not detected
MRDLG – Maximum Residual Disinfectant Level Goal	BDL – Below Detection Limits

Tables of Contaminants

INORGANIC CONTAMINANTS

Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources	Violation
Fluoride ¹	2017	ppm	4	4	0.95	0.54 – 0.95	Erosion of natural deposits; water additive which promotes strong teeth	NO
Lead ²	2017	ppb	AL =15	0	2.1	n/a	Corrosion of household plumbing systems.	NO
Copper ³	2017	ppm	AL =1.3	0	0.053	n/a	Corrosion of household plumbing systems.	NO
Nitrate/Nitrite ⁴	2017	ppm	10	10	1.2	BDL – 1.2	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits	NO

Notes:

¹Fluoride is added to water to help in the prevention of dental cavities (caries) in children.

²Of the 50 sites tested, 1 exceeded the action level. The next round of testing is due in 2020.

³Of the 50 sites tested none exceeded the action level. The next round of testing is due in 2020.

⁴Nitrate and Nitrite are measured together.



DISINFECTION BY-PRODUCTS, BY-PRODUCT PRECURSORS AND DISINFECTANT RESIDUALS

Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources	Violation
TTHMs (Total Trihalomethanes) Stage 2	2017	ppb	80	0	44.0 ¹	35.0 – 44.0	By-products of drinking water disinfection	NO
HAA5s (Haloacetic Acids) Stage 2	2017	ppb	60	0	23.0 ¹	18.0 – 23.0	By-products of drinking water disinfection	NO
TOC (Total Organic Carbon)	2017	ppm	TT	n/a	1.8	1.00 – 1.80	Decay of organic matter in the water withdrawn from sources such as lakes and streams	NO
Chlorite	2017	ppm	1.0	0.8	0.33	0.09 – 0.33	By-products of drinking water disinfection	NO
Chlorine Free	2017	ppm	MRDL = 4	MRDLG = 4	2.20	0.11 – 2.20	Drinking water disinfectant	NO

Notes:

¹The highest detected LRAA (Locational Running Annual Average).

TURBIDITY

Contaminant	MCL	MCLG	Level Found	Range	Sample Date	Violation	Typical source
Turbidity ²	TT = 1 NTU	0	0.12	n/a	2017	NO	Soil runoff
	TT = percentage of samples <0.3 NTU		100%	n/a			

Note:

²Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

MICROBIOLOGICAL CONTAMINANTS

Contaminant	MCL	MCLG	TT Level 1 Assessment Trigger	Level Detected	Sample Dates	Violation	Likely Source
Total Coliform ³	TT	n/a	Exceeds 5.0% TC+ samples in a month	1.59%	Jan 2017 – Dec 2017	NO	Naturally present in the environment.
E. coli	One Positive Sample*	0	n/a	0.00%	Jan 2017 – Dec 2017	NO	Human or animal fecal wastes.

Notes:

* A Public Water System will receive an E. coli MCL violation when there is any combination of an EC+ sample result with a routine/repeat TC+ or EC+ sample result.

³Of the 63 samples tested in Mar 2017, 1 showed a positive result. Of all the other samples tested in 2017, none showed any positive results.

Cryptosporidium Information

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life threatening illness. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. The monitoring of our source water performed in 2013 had **no detection** of cryptosporidium. Testing was only required for a period of nine months in 2013.

Location	Date	Results	Units
Chattahoochee River	Jan 2013 - Sept 2013	0	Organisms / sample
Allatoona Lake	Jan 2013 - Sept 2013	0	Organisms / sample

Required Additional Health Information

To ensure tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

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 EPA's **Safe Drinking Water Hotline at 1-800-426-4791**.

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. The Cobb County – Marietta Water Authority along with the City of Smyrna are 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>.

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 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 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, storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic (man-made) and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 people, and infants can be particularly at risk. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the EPA's **Safe Drinking Water Hotline at 1-800-426-4791**.