# · Consumer Confidence Report

## Annual Drinking Water Quality Report

ATHENS

II-1290050

Annual Water Quality Report for the period of January 1 to December 31, 2017

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by ATHENS is Ground Water

For more information regarding this report contact:

Phone (217) 636-8429

Este informe contiene información muy importante sobre cl agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

## Source of Drinking Water

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 storm water runoff, industrial or domestic wastewater discharges, oil and gas broduction, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water 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 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.

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 EPAs Safe Drinking Water Hotline at (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. FDA 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 microbial contaminants are available from the Safe Drinking Water Hotline (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. We 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.

# Source Water Information

Source	Water Name		Type of Water	Report Status	Location
WELL 4	(52049)		GW	A S. P. Ster. May be in commence and control of	1.2MI WSW WTP 280' E SANG RVR
WELL 5	(01527)		GW		1400 FT SSW OF WELL 3
WELL 6	(01816)	WELL # 6	GW		

#### Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at (211) 494-3479. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Source of Water: ATHENSTO determine Athens' susceptibility to groundwater contamination, the following documents were reviewed: a Well Site Survey published in 1989 by the Illinois EPA and a Source Water Protection Plan prepared for the City of Athens by Greene & Bradford, Inc. Consulting Engineers and published in December of 1997. Based on this information, Athens Community Water Supply's source water is susceptible to SOC contamination from non-point sources related to agricultural land use although no pesticides/herbicides were detected. The community's source water has low susceptibility to VOC contamination. The basis for this determination included no detection of any quantifiable levels of VOCs in the finished water as well as no potential sources of VOC within the recharge area. Also, as a result of monitoring conducted at the wells and entry point to the distribution system, the land use activities, and source water protection initiatives by the city (refer to the following section), the Athens Community Water Supply's source water has a low susceptibility to IOC contamination.

#### 2017 Regulated Contaminants Detected

#### Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

The concentration of a contaminant which if exceeded triggers treatment or other requirements which a vater guster much felling

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	0.057	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2017	0	15	2.4	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

## Water Quality Test Results

Definitions:

The following tables contain scientific terms and measures, some of which may require explanation.

Avg:

Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment:

A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment:

A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water

system on multiple occasions.

Maximum Contaminant Level or 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 or 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 or

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 or 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.

na:

not applicable.

mrem:

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

ppb:

micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

# Water Quality Test Results

ppm:

milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Treatment Technique or TT:

A required process intended to reduce the level of a contaminant in drinking water.

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# Regulated Contaminants

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2017	1	0.5 - 1.3	MRDLG = 4	MRDI. = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2017	19	8.7 - 23.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	72	33.5 - 105	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	10/14/2015	0.0044	0.0044 - 0.0044	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	10/14/2015	0.953	0.953 - 0.953	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	11	4.1 - 11	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	10/14/2015	8.6	8.6 - 8.6			ppm	N	Erosion from naturally occuring deposits. Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCI,	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	11/12/2014	1.46	1.46 - 1.46	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	11/12/2014	0.638	0.638 - 0.638	0	15	pCi/L	N	Erosion of natural deposits.

#### Violations Table

## Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	04/01/2017		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

## Revised Total Coliform Rule (RTCR)

The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches,

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE, MAJOR (RTCR)	05/01/2017		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.