

Annual Drinking Water Quality Report

NEW ATHENS

IL1631050

Annual Water Quality Report for the period of January 1 to December 31, 2018

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
NEW ATHENS is Purchased Surface Water

For more information regarding this report contact:

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Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo 6 habble 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 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.
- 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.

This Annual Water Quality Report was posted online to inform New Athens water system customers about the water quality. All water bills have the internet address where the report is located on them to inform customers where to find the report. This report is also available for review at the Village Hall, 905 Spotsylvania Street, New Athens, IL.

The Village of New Athens purchases water from Kaskaskia Water District. A copy of their detected contaminant tables are attached for review on pages 8, 9, and 10. Also Kaskaskia Water District had a violation in 2018 a copy of the violation and how it has been corrected is on page 11.

If you have any questions contact Tyler Liefer (618)475-2144. The regular meeting of the board of trustees is held at 7:30 P.M. on the first and third Monday of each month at Village Hall.

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 (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 who have undergone 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

Source Water Information

Source Water Name	Type of Water	Report Status	Location
CC 01-MASTER METER	SW	<u>In Use</u>	TN CTN MA WMD-INT SPRING/JOHNSON

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 618-475-2144. 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: KASKASKIA WATER DISTRICT Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection.

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.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper: Date Sampled MCLG Action Level (AL) 90th Percentile # Sites Over AL Units Violation Likely Source of Contamination

Contaminant	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/31/2016	1.3	1.3	0.255	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

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 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 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)

Job:

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

Unit:

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.

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	12/31/2018	1.8	1.5 - 2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAAs)	2018	30	7.9 - 55.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	55	42 - 85.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Violations Table

Interim Enhanced SWTR

The Interim Enhanced Surface Water Treatment Rule improves control of microbial contaminants, particularly Cryptosporidium, in systems using surface water.

Violation Type	Violation Begin	Violation End	Violation Explanation
SINGLE COMB FLTR EFFLUENT (IESWTR/LT1)	01/01/2018	01/31/2018	One turbidity measurement exceeded a standard for the month indicated. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water.

REGULATED CONTAMINANTS

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Disinfectants and Disinfection By-Products	12/31/2018	2.3	1.1 - 3	MRLDG = 4	MRLD = 4	ppm	N	Water additive used to control microbes.
Chloramines	2018	44	42.4 - 44	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Halacetic Acids (HAA5)	2018	61	60.8 - 61	No goal for the total	80	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2018	0.0445	0.0445 - 0.0445	2	2	ppm	N	Discharge of drilling wastes; Discharge metal refineries; Erosion of natural deposits.
Inorganic Contaminants	2018	1	0.52 - 0.52	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electro; production wastes.
Arsenic	2018	0.6	0.6 - 0.6	4	4.0	ppm	N	Erosion of natural deposits; Water addit which promotes strong teeth; Discharge f fertilizer and aluminum factories.
Fluoride	2018	1	1.36 - 1.36	10	10	ppm	N	Runoff from fertilizer use; Leaching fric septic tanks, sewage; Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2018	24	23.8 - 23.8			ppm	N	Erosion from naturally occurring deposits Used in water softener regeneration.
Sodium	2018	0.46	0.46 - 0.46	0	5	pci/L	N	Erosion of natural deposits.
Combined Radium 226/228	04/14/2015	1	1 - 1	0	15	pci/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	04/14/2015							

Turbidity

turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	17.1 NTU	Y	Soil runoff.
Lowest monthly & meeting limit	0.3 NTU	99%	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Violations Table

Interim Enhanced SWTR

The Interim Enhanced Surface Water Treatment Rule improves control of microbial contaminants, particularly Cryptosporidium, in systems using surface water, or ground water under the direct influence of surface water. The rule builds upon the treatment technique requirements of the Surface Water Treatment Rule.

Violation Type	Violation Begin	Violation End	Violation Explanation
SINGLE COMB FILTER EFFLUENT (IESWTR/LTT)	01/01/2018	01/31/2018	One turbidity measurement exceeded a standard for the month indicated. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water.

SWTR Turbidity Single Exceedance Template

DRINKING WATER ALERT

The Kaskaskia Water District had high turbidity levels

We routinely monitor your water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply. A water sample taken January 5th 2018 showed turbidity levels of 17 NTU turbidity units. This is above the standard of 1 turbidity unit. Because of these high levels of turbidity, there is an increased chance that the water may contain disease-causing organisms.

What should I do?

- Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers.
- The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.

What happened? What is being done?

On January 5th 2018, the Kaskaskia Water District experienced a turbidity exceedance due to the severe cold weather and unusual cold-water conditions, that caused floc particles to carry over into our filter units instead of settling out in our clarification basins prior to the filters. Fine tuning the coagulation process, resolved the issue. Issues began late in the evening of January 4th with the exceedance occurring on January 5th. KWD was back to normal operations at 1:30 pm January 5th.

For more information, please contact Robert Biana at 618-475-2626 or 700 South Market Street, New Athens IL.

62264.

General guidelines on ways to lessen the risk of infection by microbes are available from the EPA Safe Drinking Water Hotline at 1(800) 426-4791.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the Kaskaskia Water District.

Water System ID# IL1635110

Date distributed

02/21/2018