The water you drink

Annual Water Quality Report for the period of January 1 to December 31, 2019.

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

Sources of water

Tuscola receives water solely from the Champaign Division of Illinois-American Water Company (IAWC). In 1994, a new 750,000 gallon water tower was built replacing the two old smaller towers. At that time a 14" water main was laid from Champaign to Tuscola. Upon completion of the new system, Tuscola began receiving water from IAWC. Subsequently, the old local wells which had supplied the City for years, were capped off as per Division of Mining regulations.

The source of supply for Tuscola is purchased groundwater. To determine Illinois American Water Company-Champaign's susceptibility to groundwater contamination, a Well Site Survey Report from February 1991 and a source inventory conducted in 1999 by the Illinois Rural Water Association in cooperation with the Illinois EPA, were reviewed. Based on the information contained in these documents, nineteen potential sources of groundwater contamination are present that could pose a hazard to groundwater pumped by the Illinois American Water Company-Champaign community water supply wells. These include three stores/sales, two printing companies, a manufacturing/processing of chemicals, a warehouse, a vehicle sales, two lagoons, a construction/demolition co., two electrical generators/substations, three below ground fuel storages, a quarrying of material, two septic systems, and a well. The Illinois EPA has determined that Illinois American Water Company-Champaign Wells #35, #40, #41, #42, #43, #45, #46, and #47 are susceptible to IOC, VOC and SOC contamination. Wells #53, #54, #55, #56, #57, #58, #59, #60, #61, #62, #63, #64, #65 and #66 are not susceptible to IOC, VOC or SOC contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data for the wells.

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 contact Elizabeth Doellman, Water Quality Supervisor at 217-373-3273 or email at elizabeth.doellman@amwater.com. 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.

Information about *all* 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 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 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.

Radon

Radon is a radioactive gas that you can't see, taste or smell. It has been linked to lung cancer. It is found throughout the U.S. and can move up through the ground and into a home through cracks and holes in a foundation. Radon can build up to high levels in all types of homes, and it can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will, in most cases, be a small source of radon in indoor air. Illinois American Water has monitored for radon for years. The Lincoln wells and finished water were sampled for radon in 2007. Finished water levels ranged from 140 – 194 pCi/L, with an average of 167 pCi/L. The USEPA is proposing limits on radon in drinking water depending on other steps that are used to reduce radon from other indoor sources. For information on radon in indoor air, call your local health department or the National Radon Hotline at 800-SOS-RADON.

Lead

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 City of Tuscola 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.

Important Health Information

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

A Message for People with Severely Weakened Immune Systems

Cryptosporidium is a protozoan found in untreated surface waters throughout the United States (the organism is generally not present in a ground water source). Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100% 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, people with severely weakened immune systems have a risk of developing life-threatening illness. We encourage such people to consult their doctors regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it is spread through means other than drinking water.

Your questions are welcome.

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 City Council meetings held on the 2nd and 4th Monday of each month at 7:30 PM. 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 (217) 253-2112. 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 or by calling the EPA's Safe Drinking Water Hotline, 800-426-4791.

How to Read the Following Table

Both IAWC and Tuscola Water Department conduct extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the data tables. While most monitoring was conducted in 2019, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting these tables, see the "Definition of Terms" section and footnotes.

2019 Water Quality Summary – This section provided by IAWC						
Contaminant (Units) Typical Source	Amount detected	Range of detections	MCL	MCLG	Violation	Date of Sample
Regulated Substances *(Measured in the water leaving the treatment facility)*						
Alpha emitters (pCi/L) * Erosion of natural deposits	1.2	0.02-1.2	15	0	NO	2014
Arsenic (ppb) Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes	1	1-1	10	0	NO	2018
Beta/Photon Emitters (pCi/l) * Decay of natural and man-made deposits	2.0	1.7-2.0	50	0	NO	2014
Fluoride (ppm) * Erosion of Natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	0.71	0-0.71	4	4	NO	2018
Gross Alpha Exluding radon and uranium (pCi/L) Erosion of natural deposits.	1.24	0-1.24	15	0	NO	2018
Combined Radium 226/228 (pCi/L) Erosion of natural deposits	1.512	0-1.512	5	0	NO	2018
Chlorine (ppm) Water additive used to control microbes.	2.3	2-2.3	MRDL=4	MRDLG=4	NO	2019
Haloacetic Acids (HAA5) (ppb) By-product of drinking water disinfection.	26	14.4-29.1	60	n/a	NO	2019
Total Trihalomethanes (TTHM) (ppb) By-product of drinking water disinfection.	91	37.5-90.9	80	n/a	NO	2019
Manganese (ppb) Naturally occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential nutrient.	0.8	ND-0.8	n/a	n/a	NO	2019
Sodium (ppm) Erosion of naturally occurring deposits; Used in water softener regeneration	40.5	0-40.5	n/a	n/a	NO	2018
Haloacetic Acids-(HAA5) (ppb) By-product of drinking water disinfection.	26	14.4-29.1	n/a	n/a	NO	2019
Contaminants – Typical Source	**Maximum Contaminant Level Goal**	**Total Coliform Maximum Contaminant Level**	**Highest No. of Positive**	**Total No. of Positive E. Coli or Fecal Coliform Samples**	**Violation**	**Date of Sample**
Coliform Bacteria Naturally present in the environment.	0	5% of monthly samples are positive	0.8	1	NO	2019
The next section provided by the City of Tuscola Water Department	Highest Level	Range of detections	MCL	MCLG	**Violation**	Date of Sample
Inorganic chemicals						
Copper (ppm) Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	Copper 90th percentile 0.065 ppm	0 exceeding AL	AL=1.3	1.3	NO	2017
Lead (ppb) Corrosion of household plumbing systems; erosion of natural deposits	Lead 90th percentile 1 ppb	0 exceeding AL	AL=15	0	NO	2017
Disinfectants/Disinfection By-Product						
Total Haloacetic Acids (HAA5) (ppb) By-product of drinking water disinfection.	22	15.8 – 23	60	n/a	NO	2019
TTHMs [Total Trihalomethanes] (ppb) By-product of drinking water disinfection.	62	45.05 – 83.4	80	n/a	NO	2019
Chlorine (ppm) Water additive used to control microbes	1.8	1.4 – 1.8	MRDL=4	MRDLG=4	NO	2019

-Footnotes-

Beta/Photon emitters- The MCL for Beta/Photon emitters is written as 4 millirem/year (a measure of rate of radioactive decay). The EPA considers 50 pCi/L as the level of concern for beta emitters.

Chlorine and Chloramines are disinfecting agents added to control microbes that otherwise could cause waterborne diseases or other water quality concerns. Most waster systems in Illinois are required by law to add either chlorine or chloramines. Levels well in excess of the MRDL could cause irritation of the eyes or nose in some people. The value reported reflect multiple locations in the service area.

Fluoride- Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends a fluoride level of 0.7 mg/L.

Lead & Copper- Compliance with the Lead and Copper Rule (LCR) is determined by the levels of lead and copper found in samples taken from customers' taps. LCR requirements are met if the 90th percentile of all samples taken does not exceed the action level of 15 ppb for lead or 1.300 ppm for copper. The "amount detected" reported in the data table refers to the level at the 90th percentile sample.

Sodium- There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

N-Nitroso-Pyrrolidine (NPYR)- A MCL for this substance has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this substance is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

Unregulated Contaminants- Unregulated contaminants are those for which EPA has not established drinking water standards. A maximum contaminant level (MCL) for this substance has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this substance is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

-Definition of Terms-

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

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 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 Residual Disinfectant Level (MRDL): *The highest level of 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.*

Level 1 Assessment: *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 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.*

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

Ppb or ug/l- *Parts per billion or micrograms per liter; or one ounce in 7,350,000 gallons of water.*

ppm or mg/l- *Parts per million or milligrams per liter; or one ounce in 7,350 gallons of water.*

mrem:*millirems per year; a measure of radiation absorbed by the body.*

PCi/l *– Picocuries per liter, Measurement of the natural rate of disintegration of radioactive contaminants in water. (also beta particles)*

nd: *Not detected.*

n/a: *Not applicable.*

NOTE: Copies of this report will not be mailed to individual customers this year. Copies are available to be picked up at Tuscola City Hall, 214 N. Main, Tuscola, IL.

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

2019 WATER QUALITY REPORT

CITY OF TUSCOLA

TUSCOLA
Trending Rural

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