

Lead: What you need to know

Springfield's water is free from lead when it leaves the water treatment plant. Lead can first enter drinking water from your service line or internal plumbing and faucets. As water sits in plumbing for long periods of time, lead may leach into the water you drink. Take steps to help protect you and your family from exposure to lead in tap water:

- If water has not been used for several hours, run the tap until there is a noticeable temperature drop. Then run water for 30 seconds to 3 minutes before using it for cooking and drinking.
- Use cold water for cooking, drinking, and preparing baby formula.
- Clean your faucet aerator. Small particles can accumulate in faucet aerators and release lead into the water.

Visit <https://springfieldohio.gov/water-utility-lead/> to learn more.

WHERE TO CALL

Utility Billing

937-324-7365

Water Maintenance

Daytime 937-525-5800

Nights & Weekends 937-324-7663

Water Treatment Plant

937-525-5880

Water Quality

937-525-5883

City Manager

Bryan Heck

Service Director

Chris Moore 937-525-5800

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of City Commission. Please call 937-324-7300 for a schedule of meeting times and dates.

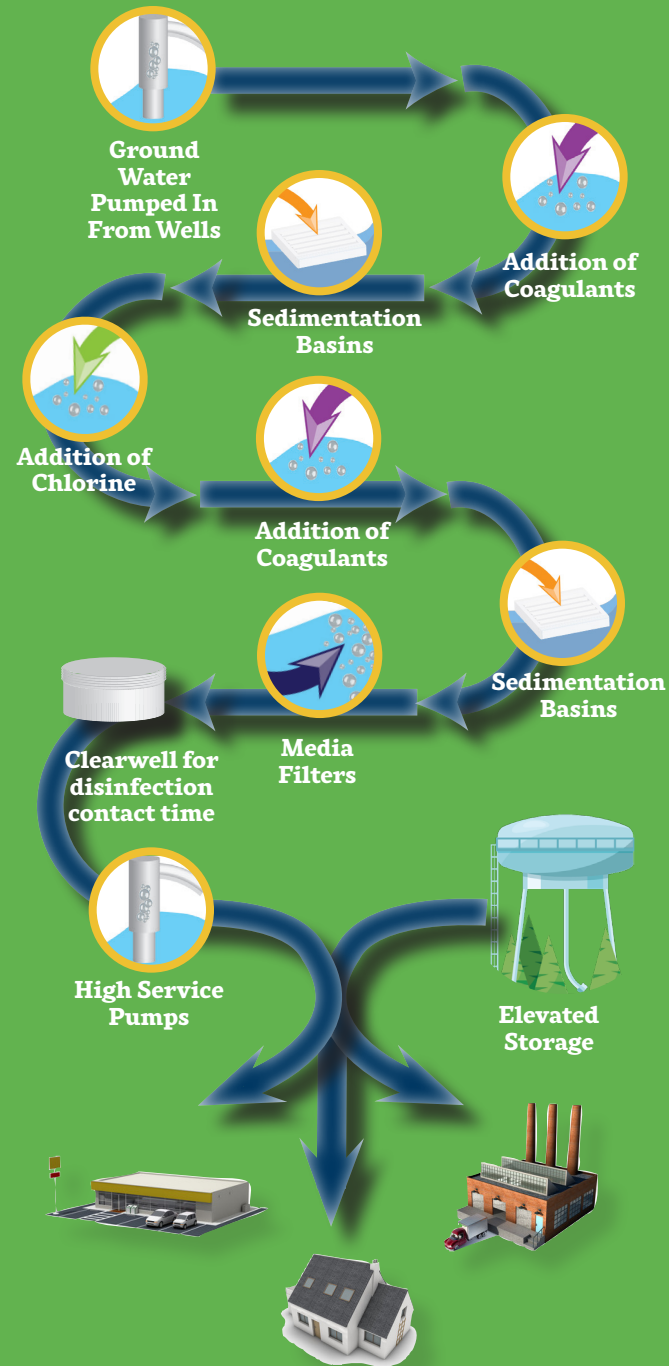
For additional information about Springfield's water, call the Water Treatment Plant Laboratory at 937-525-5883 or visit springfieldohio.gov.

Water Treatment Plant Consumer Confidence Report 2019





Springfield's Water Treatment Plant



The City of Springfield works hard to provide high quality water to you.

Thank you for the opportunity to reliably supply you with clean and safe drinking water.

We are extremely pleased to provide you with water that meets or exceeds Environmental Protection Agency (EPA) standards for safety.

Included in this report is general health information, how water is treated, water quality test results, and answers to frequently asked questions.

In 2019, the City of Springfield Water Treatment Plant (WTP) produced 3,501,610,000 gallons of potable water and met or exceeded all drinking water standards. In 2019, Springfield held an Unconditional License to Operate.

How Is My Water Treated?

Your water undergoes several treatment processes after arriving at the plant and before it is sent to the distribution system. Our water treatment includes coagulation and flocculation (to cause small particles from the raw water to adhere to each other), sedimentation (to remove those particles), chlorination (for disinfection), and filtration (to remove the very smallest particles). Sodium hexametaphosphate is also added to help with corrosion control and stability.

City of Springfield Water Quality Data Table for the period of January 1, 2019 to December 31, 2019

About your drinking water:

The EPA requires regular sampling to ensure drinking water safety. Springfield water treatment plant staff collects and analyzes water samples throughout the year as required. In 2019, Springfield sampled for microorganisms, inorganic chemicals, disinfection by-products, and disinfectants. The water supply is tested for numerous contaminants, however, not all are detected. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of our data is more than one year old. Listed below is information on those contaminants that were found and other water quality parameters for the City of Springfield drinking water.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contamination
BACTERIOLOGICAL							
Total Coliforms	0	No more than 5% of monthly samples	0		NO	2019	Naturally present in the environment
RADIOACTIVE CONTAMINANTS							
Radium (pCi/L)	0	5	0.96		NO	2014	Erosion of natural deposits
INORGANIC CONTAMINANTS							
Nitrate (ppm)	10	10	0.94		NO	2019	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
Barium (ppm)	2	2	0.0146		NO	2017	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
VOLATILE ORGANIC CONTAMINANTS							
Bromodichloromethane (ppb)			12.60	9.4 - 15.8	NO	2017	Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
Bromoform (ppm)			2.15	1.8 - 2.5	NO	2017	Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
Dibromodichloromethane (ppm)			9.00	7.3 - 10.7	NO	2017	Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
Chloroform (ppb)			20.25	9.6 - 30.9	NO	2017	Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
RESIDUAL DISINFECTANTS							
Total Chlorine (ppm)	4 (MRDLG)	4 (MRDL)	1.2	1.18-1.20	NO	2019	Disinfectants
DISINFECTION BYPRODUCTS							
Haloacetic Acids (HAA5) (ppb)	N/A	60	15.6	8.5-15.6	NO	2019	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM's) (ppb)	N/A	80	60.00	28.1-60.0	NO	2019	Byproduct of drinking water disinfection
Lead (ppb)	0	15 ppb	2.42 ppb		NO	2017	Corrosion of household plumbing; erosion of natural deposits 0 out of 30 samples were found to have lead levels in excess of the lead action level of 15 ppb.
Copper (ppm)	0	1.3 ppm	0.000		NO	2017	Corrosion of household plumbing; erosion of natural deposits 0 out of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.
OTHER WATER QUALITY PARAMETERS OF INTEREST							
pH	No goal set	7.0 - 10.5 (smcl OEPA)	9.59	9.08-9.88	NO	2019	Naturally occurring; Treatment process
Hardness (ppm)	No goal set	No set level	146	124-174	NO	2019	Naturally occurring
Magnesium (ppm)	No goal set	No set level	20.12	15-29	NO	2019	Naturally occurring
Calcium (ppm)	No goal set	No set level	25.56	16-36	NO	2019	Naturally occurring
Phosphate (ppm)	No goal set	No set level	0.99	0.78-1.2	NO	2019	Naturally occurring
Stability (Corosivity Saturation Index)	No goal set	No set level	+0.70	-2 - 1.6	NO	2019	Treatment process
Turbidity (NTU)	N/A	TT	0.055	0.17 - 1.10	NO	2019	Soil runoff
Total Alkalinity (ppm)	No goal set	No set level	88	50 - 114	NO	2019	Naturally occurring
Sodium (ppm)	No goal set	No set level	21.5	17.4-24.7	NO	2019	Naturally occurring; Treatment process
Chloride (ppm)	No goal set	250 (ppm) (smcl)	48.25	43-54	NO	2019	Naturally occurring; Treatment process
UNREGULATED CONTAMINANT MONITORING RULE 4 (UCMR4)							
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. In 2018 the Springfield Water Treatment Plant participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR4). A full list of Unregulated Contaminants can be obtained by calling the WTP laboratory at 937-525-5883.							
HAA5 (ppb)		60	6.203	4.551 - 7.679		2018	Byproduct of drinking water disinfection
HAA6Br (ppb)		N/A	6.643	4.884 - 7.92		2018	Byproduct of drinking water disinfection
HAA9 (ppb)		N/A	10.574	7.71 - 12.634		2018	Byproduct of drinking water disinfection

Definitions of some terms contained in this report:

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 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 residual disinfectant level allowed.
Maximum Residual Disinfectant Level Goal (MRDLG): The level of residual disinfectant below which there is no known or expected risk to health.
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 required process intended to reduce the level of a contaminant in drinking water.

Parts per Million (ppm): Units of measure for concentration of a contaminant. A part per million corresponds to one second in approximately 11.5 days.
Parts per Billion (ppb): Units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
Picocuries per liter (pCi/L): A common measure of radioactivity.
USEPA: United States Environmental Protection Agency
Ohio EPA: Ohio Environmental Protection Agency
NTU: Nephelometric Turbidity Units
Secondary Maximum Contaminant Level (SMCL): Non-enforceable, non-mandatory water quality standards. Guidelines to assist water systems in managing their drinking water for aesthetics.
ND: Not detected.

Source Water Information

The Springfield WTP receives its drinking water from 12 wells located in the Mad River Valley Buried Aquifer. The wellfield is located above the aquifer, which provides limited natural protection from contaminants infiltrating into the aquifer. Because of this setting, the aquifer that supplies drinking water to the City of Springfield has a high susceptibility to contamination. The City has developed a comprehensive wellhead protection program to manage potential sources of contamination within the Source Water Assessment (SWA) area to minimize any impacts to the aquifer. The SWA area encompasses all lands within a 5-year time of travel to the wellfield. Communication with property and business owners and the general public are emphasized in the SWA. Springfield's SWA report, along with information regarding our wellhead protection plan, is available on our website at springfieldohio.gov or by calling the Springfield WTP at 937-525-5880 or the Ohio EPA at 614-644-2752.

Is My Water "HARD"?

Although we do soften the water, Springfield's water is considered to be hard. The water from the supply wells has an average hardness of 352.3mg/l or 20.6 grains per gallon. The water after treatment has an average hardness of 146mg/l or 8.54 grains per gallon. What are sources of contamination to 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:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- (B) 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;
- (C) Pesticides and herbicides, which may come from a variety of sources such as agricultural, urban storm water runoff, and residential uses;
- (D) 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; and
- (E) 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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 (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 City of Springfield WTP is 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 3 minutes before using it for drinking and 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Who needs to take special precautions?

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 infection. These people should seek advice about drinking water from their health care providers. EPA/Center for Disease Control (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 (1-800-426-4791).