

## How do I participate in decisions concerning my drinking water?



Public participation and comment are encouraged at regular meetings of City Commission, which meets biweekly on Tuesdays in the Forum at City Hall.

For more information on your drinking water, contact the WTP at 937-525-5880 or visit [springfieldohio.gov](http://springfieldohio.gov).

## WHERE TO CALL

### UTILITY BILLING

937-324-7365

### WATER METER READINGS

937-324-7365

### WATER METER REPAIR

937-525-5800

### WATER LEAKS

DAYTIME ..... 937-525-5800

NIGHTS & WEEKENDS ..... 937-324-7663

### WATER DISTRIBUTION

937-525-5800

### WATER ADMINISTRATION

937-525-5800

### WATER TREATMENT PLANT

937-525-5880

### WATER QUALITY

937-525-5883

### MAYOR

WARREN COPELAND

### CITY MANAGER

JIM BODENMILLER

### SERVICE DIRECTOR

CHRIS MOORE (937-525-5800)

### OPERATIONS ENGINEER

TIM WEAVER (937-525-5800)

### WATER PLANT SUPERINTENDENT

ALLEN JONES (937-525-5880)



The City of  
**Springfield**  
Ohio

**Water Treatment  
Plant Consumer  
Confidence Report  
2017**

# 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 water.

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

We hope you find this document about the source of your water, how it's treated, test results, and answers to some frequently asked questions to be helpful. Please contact us with any questions or comments.



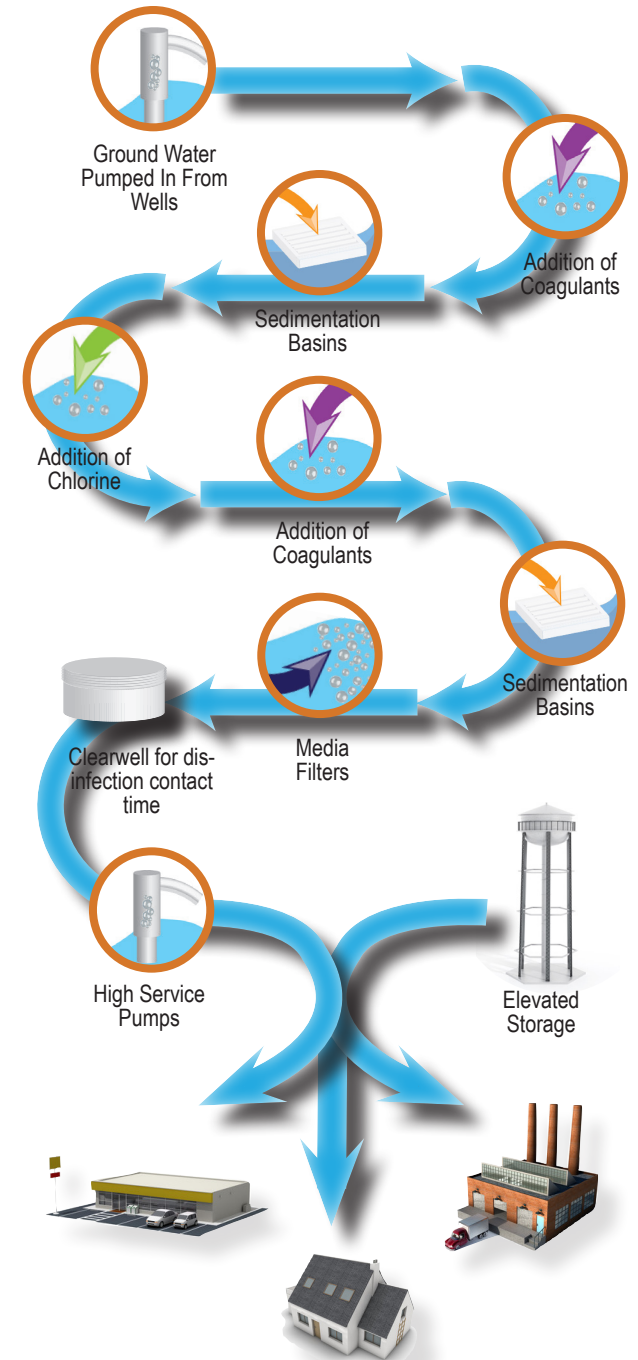
In 2017, the City of Springfield Water Treatment Plant (WTP) produced 3,229,700,000 gallons of potable water and met or exceeded all drinking water standards. In 2017 Springfield held an Unconditional License to Operate.



## 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.

## Springfield's Water Treatment Plant



## City of Springfield Water Quality Data Table for the period of January 1, 2017 to December 31, 2017

### About your drinking water:

The EPA requires regular sampling to ensure drinking water safety. The City of Springfield Water Treatment Plant conducted sampling for bacteria, inorganics, synthetic organic contaminants, volatile organic contaminants, residual disinfectants, and disinfection byproducts during 2017. Samples were collected for a total of 80 different contaminants, most of which were not detected, in the Springfield water supply. 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. Some of our data, though accurate, is more than one year old. The following is a list of water quality parameters for the Springfield WTP.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contamination
<b>BACTERIOLOGICAL</b>							
Total Coliforms	0	No more than 5% of monthly samples	0		NO	2017	Naturally present in the environment
<b>RADIOACTIVE CONTAMINANTS</b>							
Radium (pCi/L)	0	5	0.96		NO	2014	Erosion of natural deposits
<b>INORGANIC CONTAMINANTS</b>							
Nitrate (ppm)	10	10	1.14		NO	2017	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
<b>SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES</b>							
Alachlor (ppm)		0.002	<0.0002		NO	2017	Pesticides and herbicides
Atrazine (ppm)		0.003	<0.0003		NO	2017	Pesticides and herbicides
Simazine (ppm)		0.004	<0.00035		NO	2017	Pesticides and herbicides
<b>VOLATILE ORGANIC CONTAMINANTS</b>							
Bromodichloromethane (ppb)			3.88		NO	2017	Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
Bromoform (ppm)			0.68		NO	2017	Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
Dibromodichloromethane (ppm)			2.91		NO	2017	Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
Chloroform (ppb)			4.14		NO	2017	Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
<b>RESIDUAL DISINFECTANTS</b>							
Total Chlorine (ppm)	4 (MRDLG)	4 (MRDL)	1.46	0.96-1.88	NO	2017	Disinfectants
<b>DISINFECTION BYPRODUCTS</b>							
Haloacetic Acids (HAA5) (ppb)	N/A	60	8.81	7.17-10.45	NO	2017	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM's) (ppb)	N/A	80	32.24	21.20-43.27	NO	2017	Byproduct of drinking water disinfection
<b>OTHER SUBSTANCES TESTED FOR</b>							
Lead (ppb)	MCLG	AL (action level)	0.000		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.							
<b>OTHER WATER QUALITY PARAMETERS OF INTEREST</b>							
pH	No goal set	7.0 - 10.5 (smcl OEPA)	9.72	9.17-10.04	NO	2017	Naturally occurring; Treatment process
Hardness (ppm)	No goal set	No set level	151	126-182	NO	2017	Naturally occurring
Magnesium (ppm)	No goal set	No set level	20	14-27	NO	2017	Naturally occurring
Calcium (ppm)	No goal set	No set level	26	17-36	NO	2017	Naturally occurring
Phosphate (ppm)	No goal set	No set level	0.86	.55-1.09	NO	2017	Naturally occurring
Stability	No goal set	No set level	2	0-4	NO	2017	Treatment process
Turbidity (NTU)	N/A	TT	0.035	0.037-0.127	NO	2017	Soil runoff
Total Alkalinity (ppm)	No goal set	No set level	81	54-110	NO	2017	Naturally occurring
Sodium (ppm)	No goal set	No set level	20.2	14-27.5	NO	2017	Naturally occurring; Treatment process
Chloride (ppm)	No goal set	250 (ppm) (smcl)	44.4	33-54	NO	2017	Naturally occurring; Treatment process

### UNREGULATED CONTAMINANT MONITORING RULE 3 (UCMR3)

UCMR3 MONITORING benefits the environment and public health as follows: EPA and other interested parties will have scientifically valid data on the occurrence of targeted contaminants in drinking water, EPA can assess the number of people potentially being exposed, and EPA can provide an estimate of the levels of that exposure. This data set is one of the primary sources of occurrence and exposure information the agency uses to develop regulatory decisions for contaminants of concern. Below is a list of contaminants having detection levels. A full list of Unregulated Contaminants can be obtained by calling the Water Treatment Plant at 937-525-5883.

Chromium 6 (ppb)	No goal set	No set level	0.28225	0.258 - 0.300	NO	2014	Naturally-occurring element; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation
Chromium Total (ppb)	No goal set	No set level	0.39525	0.362 - 0.412	NO	2014	Naturally-occurring element; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation
Molybdenum (ppb)	No goal set	No set level	3.82	3.422 - 4.221	NO	2014	Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide used as a chemical reagent
Strontium (ppb)	No goal set	No set level	159.52	124.868 - 204.832	NO	2014	Naturally-occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions
Vanadium (ppb)	No goal set	No set level	0.2435	<0.2 - 0.246	NO	2014	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst

### 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.

**The “<”symbol:** A symbol which means “less than.”

**Picocuries per liter (pCi/L):** A common measure of radioactivity.

**EPA:** United States 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.

## 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 is considered to be susceptible 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 is emphasized in the SWA. Springfield's SWA report, along with information regarding our wellhead protection plan, is available on our website [springfieldohio.gov](http://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 351 mg/l or 20.5 grains per gallon. The water after treatment has an average hardness of 151 mg/l or 8.83 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 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 (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/CDC 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).