

CITY OF SPRINGFIELD WATER TREATMENT PLANT CONSUMER CONFIDENCE REPORT FOR YEAR 2014



Dear Valued Customer,

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 Standards for safety. We hope you find this document about the source of your water, how it's cleaned, test results, and answers to some frequently asked questions to be helpful. Please contact us with any questions or comments. In 2014, the City of Springfield Water Treatment Plant produced 4,016,890,000 gallons of potable water and met or exceeded all drinking water standards. We had TWO violations in 2014, (Failure to Report Contract Samples in Time). Springfield currently holds 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.

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 of 351mg/l or 20.40 grains hardness. The water after treatment has an average of 148mg/l or 8.60 grains hardness.

What's In My Drinking Water? Drinking water may include small amounts of contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. As water travels over and through the ground on its way to the Mad River Valley Buried Aquifer, it dissolves naturally occurring minerals, can pick up substances resulting from the presence of animals or from human activity, and in some cases, radioactive materials. To ensure that our water is safe to drink, we treat and disinfect it to meet or exceed the standards set by the USEPA. More information about contaminants and potential health effects may be obtained by contacting the USEPA Safe Drinking Water Hotline at 1-800-426-4791.

Section 1: Source Water Information. Springfield WTP receives its drinking water from 12 wells located in the Mad River Valley Buried Aquifer. Due to the depth and porosity of this aquifer, there is a high susceptibility to contamination. Also, several potential sources of contamination have been identified within the Source Water Assessment (SWA) Area. This area encompasses all lands within a (5) five-year time of travel to the well-field. The City Of Springfield has developed a comprehensive SWA plan to manage all potential sources of contamination within this zone and to minimize impacts to the aquifer. Communication with property and business owners and the general public are emphasized in the SWA. SWA reports are available by calling the Springfield WTP at 937-525-5880 or the Ohio EPA at 614-644-2752.

Section 2: What are sources of contamination to drinking water? The sources of drinking water, both tap and bottled include: rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water passes over and through the ground it is likely to pick up dissolved minerals, contaminants, and sometimes radioactive materials. Contaminants that may be present in source water include: **(A) Microbial** - Viruses and Bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. **(B) Inorganics** - Such as salts and metals, which can be naturally occurring or result from urban storm water run off, 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 run off and residential uses. **(D) Organic Chemicals (synthetic and volatile)** - By-products of industrial processes and petroleum production. Can also come from gas stations, urban storm water run off and septic systems. **(E) Radioactive** - Can be naturally occurring or result from oil and gas production, and mining.

Section 3: 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)

Section 4: What is the quality of my drinking water? The EPA requires regular sampling to ensure water safety. The City of Springfield Water Treatment Plant conducted sampling for Bacteria, Inorganics, SOC's, VOC's, Nitrites, Nitrates, Lead, Copper, Disinfection byproducts, Sodium, and Chloride. Samples were collected for a total of 13 different contaminants 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. Below is a list of water quality parameters for the Springfield Water Treatment Plant.

For more information concerning the water quality or the Water Treatment Plant, please visit the City's website at www.ci.springfield.oh.us or contact Allen Jones, Water Plant Superintendent, at 937-525-5880 or e-mail your questions or concerns to: ajones@ci.springfield.oh.us.

CONTAMINANT	AVERAGE	HIGHEST DETECTION	MCL	SOURCE
INORGANICS				
BARIUM		0.0199mg/l	2mg/l	natural deposits, industrial discharge
NITRATE		1.17mg/l	10mg/l	field runoff, sewage, natural deposits
LEAD	0.0042mg/l	0.00754mg/l	0.015mg/l	geological, leaching from plumbing
COPPER	0.0272mg/l	0.11mg/l	1.3mg/l	geological, leaching from plumbing
TTHM'S	22.49ug/l	47.53ug/l	80ug/l	byproduct of drinking water disinfection
HAA5	4.09ug/l	6.88ug/l	60ug/l	byproduct of drinking water disinfection
TOTAL CHLORINE	1.43mg/l	2.21mg/l	4.0mg/l	water additive to control microbes
TOTAL COLIFORM		1 sample or 0.1%	5%	naturally present in environment
SODIUM	13.33mg/l	21.8mg/l	N/A	naturally present in environment
CHLORIDE	35.53mg/l	43.5mg/l	250mg/l	naturally present in environment

QUALITY	AVERAGE	HIGHEST DETECTION
pH	9.62	9.87
HARDNESS	148	174mg/l
MAGNESIUM	23mg/l	28mg/l
CALCIUM	21mg/l	26mg/l
PHOSPHATE	0.74mg/l	1.17mg/l
STABILITY	2	3
TURBIDITY	0.039NTU	0.099NTU
TOTAL ALKALINITY	78mg/l	104mg/l

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 are the results of the 2014 UCMR 3 sampling event. Springfield sampled for 21 separate contaminants and reported only the ones that had results above the lowest detection limit.

CONTAMINANT	AVERAGE	HIGHEST DETECTION
CHROMIUM-6	0.28225ug/l	0.300ug/l
CHROMIUM (TOTAL)	0.39525ug/l	0.412ug/l
MOLYBDENUM	3.82ug/l	4.221ug/l
STRONTIUM	159.52ug/l	204.832ug/l
VANADIUM	0.2435ug/l	0.246ug/l

ppm or mg/l: Parts per Million

ppb or ug/l: Parts per Billion

<: Less than symbol

NTU: Nephelometric Turbidity Units

BDL: Below Detectable Limits

MCLG: Maximum Contaminant Level Goal –

The level of a contaminant in drinking water below which there is no known or expected risk to health.

MCL: Maximum Contaminant Level: Threshold limit allowed.

(AL): Action Level - contaminant concentration that triggers a treatment requirement.

TT: Treatment Technique - Process intended to reduce contaminant level in water.

WHERE TO CALL

BILLING

324-7365

WATER METER READINGS

324-7365

WATER METER REPAIR

525-5800

WATER LEAKS

DAYTIME

525-5800

NIGHTS - WEEKENDS & HOLIDAYS

324-7663

WATER DISTRIBUTION

525-5800

WATER ADMINISTRATION

525-5800

WATER TREATMENT PLANT

525-5880

WATER QUALITY

525-5880

MAYOR

WARREN COPELAND

CITY MANAGER

JIM BODENMILLER

SERVICE DIRECTOR

CHRIS MOORE (525-5800)

OPERATIONS ENGINEER

TIM WEAVER (525-5800)

WATER PLANT SUPERINTENDENT

ALLEN JONES (525-5880)