# WRIGHT STATE UNIVERSITY





Drinking Water Consumer Confidence Report

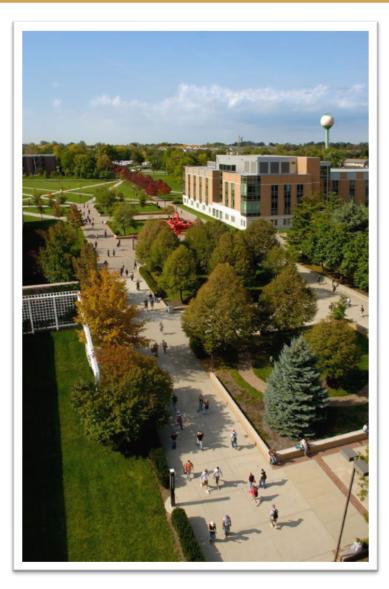


WRIGHT STATE UNIVERSITY

2022

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For more information please contact:			
Environmental Health and	937-775-2215		
Safety			
Facilities Management and Campus Operations	937-775-4444		
Campus Operations			
US EPA Safe Drinking	1-800-426-4791		
Water Hotline			

## Wright State University Drinking Water Consumer Confidence Report for 2022

## Introduction

The Wright State University Public Water System has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

## Your drinking water met Ohio EPA standards.

## Source Water Information

Wright State University receives its drinking water from two wells drilled below the earth's surface. The first well was installed in 1968 and is still in operation today. These wells are located over the Mad River Buried Valley Aquifer, which are located at the northwest end of Lot #20 and adjacent to Kauffman Road.

Wright State University is a community public water system serving approximately 13,068 people. Its public water system (PWS) number is OH2902012 and name is Wright State University. It is classified as a type C – Community public water system with 39 connections and its source is from groundwater (GW). A community public water system is a system that has at least 15 service connections used by year-round residents of the area or regularly serves 25 or more vear-round residents. Wright State's system is designed to produce 1,008,000 gallons per day (GPD) and Wright State's average use is 122,000 GPD. The treatment process includes iron and manganese removal, ion exchange softening to remove minerals. and chlorine disinfection to eliminate bacteria. A phosphorous compound is added to control pipe corrosion to prevent lead and copper that may be present in pipes from leaching into the water. One elevated storage tank holds 125,000 gallons. An auxiliary supply is available by two connections to Fairborn's water system.

The 1996 Amendments to the Safe Drinking Water Act require the Ohio Environmental Protection Agency (OEPA) to conduct source water assessments for all Public Water Systems (PWS's). In 2002, the Ohio EPA completed an assessment and provided information to assist Wright State to understand the potential threats to their water supply and help them protect their water supply.

According to the study, the aquifer that supplies the drinking water to the Wright State University has a high susceptibility to contamination. This determination was made because of the following reasons:

- The sand and gravel aquifer is shallow with a depth to water that ranges from 15-30 feet below the surface; and
- there is no confining layer which could act as a barrier between the ground surface and the aquifer; and
- there are potential contaminant sources that exist within and just outside the Drinking Water Source Protection Area that could potentially impact Wright State University's drinking water.

Consequently, the likelihood that the Wright State University's source of drinking water could become contaminated is high and it is critical that potential contaminant sources are handled carefully with the implementation of the appropriate protective strategies.

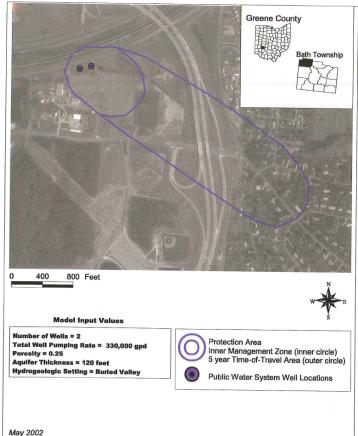


Figure 1. Drinking Water Source Protection Area for Wright State University Public Water System Identification #2902012 (Source: Drinking

Water Source Assessment for Wright State University, Ohio EPA, May 2002)

For any questions and/or concerns and for copies of the Source Water Assessment Report prepared for Wright State University's Public Water Supply contact Marjorie Markopoulos, PhD, Director of Environmental Health and Safety at <u>marjorie.markopoulos@wright.edu</u> or 937-775-2797.

#### Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste -Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Wright State's Public Water System also has an emergency connection with the City of Fairborn. Wright State may use water with water from the City of Fairborn for emergency or other operational needs. During 2022, Wright State's Public Water System connected to the City of Fairborn's water supply on October 30-October 31 due to a construction complication for the water treatment modernization. Beginning on December 13, 2022, the connection is being used while Wright State wells are under repair for the modernization project. The total volume of Fairborn's water used in October 2022 was 0.167 MG and 1.351 MG was used in December 2022. This report does not include information for the water supplied from the City of Fairborn. A copy of Fairborn's 2022 Consumer Confidence Report can be obtained by visiting the City of Fairborn Water Department website

#### at

https://www.fairbornoh.gov/news\_detail\_T49\_R90.php or by making a written request to: Fairborn Division of Water and Sewer, 44 W. Hebble Ave, Fairborn, OH 45324.

## 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:

- 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; and
- Radioactive contaminants, which can be naturallyoccurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA 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.

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 Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

## 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 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).

## About your drinking water

The EPA requires regular sampling to ensure drinking water safety. Wright State University conducted sampling for *bacteria, inorganic, synthetic organic, and volatile organics* during 2022. Samples were collected for a total of approximately 35 different contaminants and 3000 analyses most of which were not detected in the Wright State University 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, are more than one year old.

## Monitoring & Reporting Violations & Enforcement Actions

In 2020, Wright State University has detected lead in levels exceeding the federal action level of 15 parts per billion (ppb) in 4 tap locations in 3 buildings. Thirty (30) samples from different tap locations were taken on September 26-28, 2020. Four (4) of the thirty (30) samples had reported lead levels exceeding the federal lead action level and ranged from 20.3 to 140 ppb. Lead can cause serious health problems, especially for pregnant women and young children.

For the 2020 sampling event, the 90<sup>th</sup> percentile for lead at Wright State University was 20.3 micrograms per liter ( $\mu$ g/L), which means 90% of the samples collected had lead levels below 20.3 $\mu$ g/L. When the 90t<sup>h</sup> percentile for lead sample results exceeds 15  $\mu$ g/L, Wright State University is required to take action to correct the exceedance.

Wright State University worked with Ohio EPA to correct this issue. Wright State increased its sampling frequency and number of samples from 30 samples a year to 60 samples twice a year. Wright State also implemented a regular flushing program to reduce the amount of time water may spend in the pipes. Corrosion treatment to prevent lead and copper that may be present in pipes from leaching into the water was implemented in October 2022. The treatment includes the addition of a phosphorous compound and pH control to limit pipe corrosion

Lead typically enters the water primarily as a result of corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. There are steps the public can take to reduce their lead exposure, which include running the water for 30 seconds to 3 minutes (or until it is noticeably colder) before using it for drinking, cooking, or preparing baby formula. For more information on the health effects of lead, visit U.S. EPA's website at: www.epa.gov/lead.

Contact Marjorie Markopoulos, PhD, Director of Environmental Health and Safety at (937) 775-2797 or <u>ehs@wright.edu</u>.

For more information about lead in drinking water, visit US EPA's Web site at <u>www.epa.gov/lead</u>; call the National Lead Information Center at 1-800-424-LEAD; or contact your health care provider.

## Table of Detected Contaminants

The Table of Detected Contaminants contains the information on those contaminants that were found in the Wright State University drinking water.

## Non-regulated Contaminants

Non-regulated contaminants are contaminants for which Ohio EPA does not require testing and does not have a MCL. The table below lists the unregulated contaminants that were detected in Wright State's drinking water. Presently, there are no MCL or Action Levels for these contaminants. The table includes samples that were collected and analyzed for operational management of the water treatment plant, studies to aid in the design stage for the modernization of the treatment plant, and studies for the control of corrosion control for lead and copper.

## **Table of Detected Contaminants**

Contaminants (Units)	MC	MCLG MCL		Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants	
(Units)					Radioactive Contaminants				
Alpha emitters (pCi/l)	0 15		15	1.41 ±1.69 (MDC=2.98) Carrier Recovery: NA Tracer Recovery: NA	NA	NO	2020	Erosion of natural deposits	
Radium-228 (pCi/l)	0 5		5	0.459 ±0.423 (0.863) Carrier Recovery:61% Tracer Recovery: 80%	NA	NO	2020	Erosion of natural deposits	
					Inorganic Contaminants				
Barium (ppm)	:	2	2	0.103	NA	NO	2020	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Fluoride (ppm)		4	4 .56		0.53 - 0.59	NO	2022	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
					<b>Residual Disinfectants</b>				
Total Chlorine (mg/L)		DLG 4	MRDL 4	1.05	0.70 to 1.17	NO	2022	Water additive used to control microbes.	
					<b>Disinfection Byproducts</b>				
Haloacetic Acids (ppb)	0		60	5.1	2.4 - 5.1	NO	2022	Byproduct of drinking water chlorination	
TTHMs [Total Trihalomethanes] (ppb)		0	80	34.1	21.0 - 34.1	NO	2022	Byproduct of drinking water chlorination	
				Vo	olatile Organic Contaminan	ts			
Dichloromethane (ppb)		0	5	1.3	NA	NO	2020	Discharge from pharmaceutical and chemical factories	
				Lead a	nd Copper (January – June	2022)			
Contaminants (units)	Action Level (AL)	MCLG	Individual Results over the AL	90% of test levels were less than	Violation	Month - Y	ear Sampled	Typical Source of Contaminants	
Lead (ppb)	15 ppb 0 ppb NA		NA	5.2	NO	May 2022			
	0 out of 60 samples were found to have lead levels in excess of the lead action level (AL) of 15 ppb								
Copper (ppm)	1.3 ppm 1.3 ppm		NA	0.240	NO	May 2022		Corrosion of household plumbing systems	
	0 out of 60 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.								
					d Copper (June – Decembe				
Lead (ppb)	15 ppb	0 ppb	22.5 ppb out of 60 samples we	5.1 ere found to have lead levels in	NO excess of the lead action lev		ber 2022		
Copper (ppm)	1.3 ppm      1.3 ppm      NA      0.146      NO      November 2022      Corrosion of household plumbing system        0 out of 60 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.      Corrosion of household plumbing system      Corrosion of household plumbing system							Corrosion of household plumbing systems	

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

## **Unregulated Contaminants**

Unregulated contaminants are contaminants for which Ohio EPA requires monitoring. The table below lists the unregulated contaminants that were detected in Wright State's drinking water. Presently, there are no MCL or Action Levels for these contaminants.

Unregulated Contaminants (Units)	Average Level Found	Range of Detections	Sample Year	Sample Location
Bromochloroacetic Acid	1.8	NA	2021	Distribution
Bromodichloromethane (ppb)	7.4	5.8 - 8.6	2022	Distribution
Bromoform (ppb)	6.8	4.5 - 9.1	2022	Distribution
Chloroform (ppb)	2.5	2.2 - 2.8	2022	Distribution
Dibromoacetic Acid (ppb)	3.1	2.4 - 3.8	2022	Distribution
Dibromochloromethane (ppb)	11.1	8.5 - 13.6	2022	Distribution and Entry point
Dichloroacetic Acid (ppb)	1.3	<1 - 1.3	2022	Distribution
Total Organic Carbon (ppb)	1700	NA	2019	Entry point
Bromide (ppb)	81.2	NA	2019	Entry point
Haloacetic Acid (HAA5) (ppb)	2.73	1.81-3.18	2018	Distribution
Haloacetic Acid (HAA9) (ppb)	7.89	6.88-9.25	2018	Distribution
Haloacetic Acid (HAABr) (ppb)	6.45	3.98-8.40	2018	Distribution
Nickel (ppb)	3.2	NA	2020	Entry point

## **Non-Regulated Contaminants**

Non-regulated contaminants are contaminants for which Ohio EPA does not require testing and does not have a MCL. The table below lists the unregulated contaminants that were detected in Wright State's drinking water. Presently, there are no MCL or Action Levels for these contaminants.

Non-regulated Contaminants (Units)	Average Level Found	Range of Detections	Sample Year	Reason for sampling
Iron (ppm)	0.21	< 0.1 - 0.21	2022	Entry point
Manganese (ppm)	0.115	0.0996 - 0.127	2020	Raw
Manganese (ppm)	0.009	< 0.005 - 0.0097	2021	Distribution
Hardness (mg/L as CaCO <sub>3</sub> )	165	104 - 465	2022	Entry point
Chloride (ppm)	204	39-225	2022	Entry and Distribution for operational control and monitoring for 2013 Salt Pile Notice of Violation
Chloride (ppm)	212	204 - 219	2022	Raw well for Operational control and monitoring for 2013 Salt Pile Notice of Violation
Strontium (ppb)	3075	2260-3890	2020	Entry point analysis for water plant modernization
рН	6.5	NA	2020	Raw well for corrosion control study
Temperature (°C)	12.2	NA	2020	Raw well for corrosion control study
Alkalinity (mg/L as CaCO <sub>3</sub> )	374	371-376	2020	Raw well for corrosion control study
Total Dissolved Solids (mg/L)	747	458 - 1030	2020	Raw well for corrosion control study
Hardness (mg/L as CaCO <sub>3</sub> )	508	480 - 580	2022	Raw well
Sulfate (mg/L)	54.5	48.2 - 60.1	2020	Raw well for corrosion control study
Iron (mg/L)	1.827	0.82 - 3.60	2021	Raw well for corrosion control study
Manganese (mg/L)	0.115	0.0996 - 0.127	2020	Raw well for corrosion control study
pH	7.93	7.54 - 8.68	2022	Entry point
Temperature (°C)	13.4	11.7 - 15	2020	Entry point for corrosion control study
Alkalinity (mg/L as CaCO <sub>3</sub> )	346	219 - 300	2022	Entry point
Total Dissolved Solids (mg/L)	963	916 - 1010	2020	Entry point for corrosion control study
Hardness (mg/L as CaCO <sub>3</sub> )	166	104 - 465	2022	Entry point
Sulfate (mg/L)	53.7	53.5 - 53.9	2020	Entry point for corrosion control study
pH	7.89	7.59 - 8.38	2022	Distribution
Temperature (°C)	21.59	16.9 - 26.7	2020	Distribution for corrosion control study
Alkalinity (mg/L as CaCO <sub>3</sub> )	342	245 - 365	2022	Distribution
Calcium (mg/L as Ca)	26.0	22.9 - 28.6	2020	Distribution for corrosion control study
Total Dissolved Solids (mg/L)	937	580 - 1690	2020	Distribution for corrosion control study
Hardness (mg/L as CaCO <sub>3</sub> )	213	129 - 301	2022	Distribution
Iron (mg/L)	0.22	< 0.10 - 0.22	2020	Distribution for corrosion control study
Magnesium (mg/L)	10.0	8.35 - 11.5	2020	Distribution for corrosion control study
Potassium (mg/L)	1.94	1.26 - 2.39	2020	Distribution for corrosion control study
Silica (mg/L)	14.7	14.1 - 15.2	2020	Distribution for corrosion control study
Sodium (mg/L)	379	373 - 383	2020	Distribution for corrosion control study
Ethylene Glycol (ppb)	16,350	<5000-67,000	2021	Raw, Distribution, and Entry point for contaminant detection during 2021 Water Warning
Orthophosphate as P (mg/L)	1.3	0.6 - 2.1	2022	Entry point for corrosion control
Orthophosphate as P (mg/L)	1.2	0.8 - 1.9	2022	Distribution for corrosion control

### Lead Educational Information

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. Wright State University 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 at 800-426-4791or at http://www.epa.gov/safewater/lead.

#### Ground Water Rule

On December 20, 2013, Wright State University received a Notice of Violation (NOV) relating to the road salt storage impacts to ground water in Wright State's wellfield. It was observed that the chloride levels in tested from the drinking water source wells had been increasing since the mid-1980s. In 2013, the chloride levels were measured at 390 ppm, which exceeds the Secondary Maximum Contaminant Level (SMCL) of 250 ppm. SMCL's are non-mandatory guidelines and are established to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color and odor.

From that time, Wright State has been working closely with the Ohio EPA to remediate and reduce the contaminant. Throughout 2013 to 2016, Wright State purchased approximately 40,000 to 60,000 gallons of water daily from the City of Fairborn to blend with the raw water from the Wright State wells to dilute the chloride concentrations below the SMCL. Additional corrective measures implemented included moving the salt storage barn, reviewing and improving well field protective measures, and implementing long-term remediation solutions to reduce the chloride levels below the SMCL in 2016. Wright State's Public Water System is undergoing capital improvements which will renovate our aging water treatment plant to provide improved water quality, enhanced system reliability, and continued service to our university community. The updates include changing from the ion-exchange

process to a membrane-based reverse osmosis system, which will decrease the levels of chloride in the finished water. The project is designed to meet or exceed current water quality regulatory requirements and it is expected to be completed by January 2024.

Wright State continues to work with the Ohio EPA on additional measures to remediate, protect, and improve the water in the aquifer, specifically for the Notice of Violation for the Water Treatment Plant/Perched Water Bearing Zone (PWBZ).

Additional information on SMCL's can be found at <u>https://www.epa.gov/dwregdev/drinking-water-</u>regulations-and-contaminants#Secondary.

## Revised Total Coliform Rule (RTCR) Information

All water systems were required to begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the Public Water System (PWS).

## License to Operate (LTO) Status Information

In 2022 Wright State had an unconditioned license to operate our water system.

#### Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit <u>www.epa.gov/watersense</u> for more information.

### **Public Participation and Contact Information**

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

While we do not hold regular meetings, customers are encouraged to participate by contacting:

> Marjorie Markopoulos, PhD Director of Environmental Health and Safety 937-775-2797 marjorie.markopoulos@wright.edu

## **Drinking Water Notice**

In March 2023, Wright State received Notice of Violation for a missed sample for pH and orthophosphate for water quality monitoring. This missed sample required a Drinking Water Notice.

Monitoring requirements not met for Wright State University PWS. We are required to monitor your drinking water for corrosion control indicators. During the March 1 - 31, 2023 monitoring period, Wright State University PWS (public water system) failed to collect the appropriate number of water quality parameter samples (pH and orthophosphate) required by Ohio EPA.

#### What Should I Do?

This notice is to inform you that Wright State University PWS did not monitor and/or report results for corrosion control indicators as required by Ohio EPA during the March 1 - 31, 2023 monitoring period. You do not need to take any actions in response to this notice.

#### What Is Being Done?

Wright State University PWS will take steps to ensure that adequate monitoring will be performed in the future.

Additional information may be obtained by contacting Wright State University PWS at: Marjorie Markopoulos: 937-775-2797: <u>Marjorie.markopoulos@wright.edu</u>:

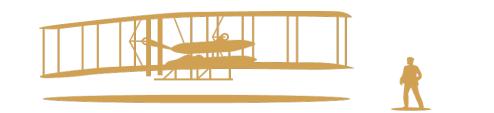
Please share this information with all the other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or distributing copies by hand or mail. Date Distributed: 6/30/2023.

PWS ID: OH2902012 Facility ID: 2954592 Violation ID: 11190

## Definitions of some terms contained within this report.

Unit Descriptions				
Term	Definition			
ррт	parts per million, or milligrams per liter (mg/L). A part per million corresponds to one second in a little over 11.5 days.			
ррb	parts per billion, or micrograms per liter ( $\mu$ g/L). A part per billion corresponds to one second in 31.7 years.			
NA	Not applicable			
ND	Not detected			
NR	Monitoring not required, but recommended.			
"<" symbol	A symbol which means less than. A result of $<5$ means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.			

Important Drinki	ng Water Definitions
Term	Definition
MCLG	Maximum Contaminant Level Goal: 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.
MCL	Maximum Contaminant Level: 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.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	Maximum residual disinfection level goal. 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.
MRDL	Maximum residual disinfectant level. 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.
MNR	Monitored Not Regulated
MPL	State Assigned Maximum Permissible Level
SMCL	Secondary Maximum Contaminant Level are non-mandatory water quality standards that are used as guidelines to assist public water systems in managing their drinking water for aesthetic considerations such as taste, color, and odor.
Microcystins	Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.
Cyanobacteria	Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins, which at sufficiently high concentrations can pose a risk to public health.
Cyanotoxin	Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins, and skin toxins. Also sometimes referred to as "algal toxin".



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