Wellston Public Water System

Consumer Confidence Report

City of Wellston PWS

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Wellston City PWS
Drinking Water Consumer Confidence
Report For 2023

Introduction

The City of Wellston PWS 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. The City of Wellston is making strides in improving the quality of water and the reliability of your drinking water system. Groundbreaking on our new Water Treatment Facility is set for this year! We are also applying for several grants to make other much needed improvements to the distribution system.

Source Water Information

The City of Wellston PWS receives its drinking water from Little Raccoon Creek and an abandoned coal mine as a ground water source.

For the purposes of source water assessments, all surface waters are considered to be susceptible to contamination. By their nature surface waters are accessible and can be easily contaminated by chemicals and pathogens. Also, compared to ground water, they tend to move swiftly, so an upstream spill may rapidly arrive at the public drinking water intake with little warning or time to prepare. The City of Wellston additionally uses water from the abandoned coal mine, which is a mixture of ground water and surface water. This water also has a high susceptibility to contamination. More detailed information is provided in the City of Wellston's Drinking Water Source Assessment report, which can be obtained by contacting David Lehew at 740-384-6274.

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 agriculture, 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; (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, 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. The Wellston City PWS conducted sampling for bacteria; inorganic; synthetic organic; volatile organic during 2023**.** Samples were collected for a total of 50 different contaminants, most of which were not detected in the City of Wellston PWS 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.

Table of Detected Contaminants

Listed below is information on those contaminants that were found in the Wellston City PWS drinking water.

Distribution System							
Contaminants (units)	**MCLG**	**MCL**	**Level Found**	**Range of Detections**	**Violation**	**Year Sampled**	**Typical Source of Contaminants**
Residual Disinfectants							
Total Chlorine (ppm)	MRDLG=4	4	1.86	1.62 - 2.19	No	2023	Water additive used to control microbes.
Disinfection By-Products							
Haloacetic Acid HAA5 (ppb)	N/A	60	39.7	0 - 58.7	No	2023	By-product of drinking water chlorination
Trihalomethane TTHMS (ppb)	N/A	80	57.4	8.6 - 92.2	No	2023	By-product of drinking water chlorination

Lead and Copper							
Contaminants (units)	**Action Level**	**MCLG**	**Individual Results over the AL**	**90% of test levels were less than**	**Violation**	**Year Sampled**	**Typical Source of Contaminants**
Lead (PPB)	15	0	N/A	2	No	2023	Corrosion of household plumbing systems; erosion of natural deposits
	0 out of 20 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (PPM)	1.3	1.3	N/A	0.072	No	2023	Corrosion of household plumbing systems; erosion of natural deposits
	0 out of 20 samples were found to have copper levels in excess of the lead action level of 1.3 ppm.						

North Plant							
Contaminants (units)	**MCLG**	**MCL**	**Level Found**	**Range of Detections**	**Violation**	**Year Sampled**	**Typical Source of Contaminants**
Inorganic							
Barium (ppm)	2	2	0.023	N/A	No	2023	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	4	4	1.22	1.07 - 1.53	No	2023	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	0.37	<0.10 - 0.37	No	2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

South WTP							
Contaminants (units)	**MCLG**	**MCL**	**Level Found**	**Range of Detections**	**Violation**	**Year Sampled**	**Typical Source of Contaminants**
Inorganic							
Barium (ppm)	2	2	0.018	N/A	No	2023	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	4	4	0.168	N/A	No	2023	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	0.27	<0.10 - 0.27	No	2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

North Plant							
Contaminants (units)	**MCLG**	**MCL**	**Level Found**	**Range of Detections**	**Violation**	**Year Sampled**	**Typical Source of Contaminants**
Total Organic Carbon (ppm)	N/A	TT	2.9	2 - 3.2	No	2023	Naturally present in the environment
Turbidity (NTU)	N/A	TT	0.27	0.17 - 0.31	No	2023	Soil Runoff
Turbidity (% meeting Standard)	N/A	TT	100	99.5 - 100	No	2023	Turbidity Standard
Total Organic Carbon (TOC)							
MCL	**Minimum Ratio of % removal to required % removal**		**Level Found**	**Range of Monthly Ratios**	**Violation**	**Year Sampled**	**Typical Source of Contaminants**
TT	1.0		1.03	0.95 - 1.52	No	2023	Naturally present in the environment.

South Plant							
Contaminants (units)	**MCLG**	**MCL**	**Level Found**	**Range of Detections**	**Violation**	**Year Sampled**	**Typical Source of Contaminants**
Total Organic Carbon (ppm)	N/A	TT	0.9	0.7 - 1.3	No	2023	Naturally present in the environment
Turbidity (NTU)	N/A	TT	0.29	0.11 - 0.29	No	2023	Soil Runoff
Turbidity (% meeting Standard)	N/A	TT	100	N/A	No	2023	Turbidity Standard
Total Organic Carbon (TOC)							
MCL	**Minimum Ratio of % removal to required % removal**		**Level Found**	**Range of Monthly Ratios**	**Violation**	**Year Sampled**	**Typical Source of Contaminants**
TT	1.0		1.00	1 - 2.22	No	2023	Naturally present in the environment.

The value reported under “Level Found” for Total Organic Carbon (TOC) is the lowest ratio between percent of TOC actually removed to the percentage required to be removed. A value greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A Value of less than one (1) indicates a violation of the TOC removal requirements.

Turbidity

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time. As reported above, the Wellston City PWS’s highest recorded turbidity result for 2023 was 0.31 NTU and lowest monthly percentage of samples meeting the turbidity limits was 99.5%

Table of Operational Contaminant Tests

The Ohio EPA requires operational testing for some contaminants that are not subject to an MCL, treatment technique, or action level. Listed below is information on those contaminants that were found in the Wellston City PWS drinking water.

North Plant				
Contaminants (units)	**Sample Year**	**Average Level Found**	**Range of Detections**	**Sample Location**
Iron (ppm)	2023	0.018	N/A	Entry Point
Manganese (ppm)	2023	0.009	<0.010 - 0.05	Entry Point

South Plant				
Contaminants (units)	**Sample Year**	**Average Level Found**	**Range of Detections**	**Sample Location**
Iron (ppm)	2023	0.000	N/A	Entry Point
Manganese (ppm)	2023	0.003	<0.010 - 0.012	Entry Point

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. Wellston City PWS 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 800-426-4791 or at http://www.epa.gov/safewater/lead.

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 PWS.

License to Operate (LTO) Status Information

- In 2023 we had an unconditioned license to operate our water system.

Public Participation and Contact Information

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of Wellston City Council which meets the First and Third Thursday each month at 7 p.m. For more information on your drinking water contact David Lehew at 740-384-6274.

Definitions of some terms contained within 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 level of a 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 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.

- **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.

- **Contact Time (CT)** means the mathematical product of a "residual disinfectant concentration" (C), which is determined before or at the first customer, and the corresponding "disinfectant contact time" (T).

- **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".

- **Level 1 Assessment** is a study of the water system to identify the potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

- **Level 2 Assessment** is 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.

- **PFAS:** Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing.

- **Parts per Million (ppm)** or **Milligrams per Liter (mg/L)** are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

- **Parts per Billion (ppb)** or **Micrograms per Liter (µg/L)** are 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. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.