# Wellston Public Water System Consumer Confidence Report



City of Wellston PWS 203 E. Broadway St. Wellston, OH 45692 Plant Phone: 740-384-6274

PWS: OH4001912

#### **Wellston North and South PWS**

#### 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 Strives to produce quality drinking water, last year we announced that the City of Wellston was doing preliminary work to build a new water plant. This year I can report that the required pilot testing was completed, and engineering is underway. Unfortunately, this is a time-consuming endeavor, the consumers will be kept up to date in the coming year as we make progress on this exciting project.

## **Source Water Information**

The City of Wellston PWS receives its drinking water from Little Raccoon Creek and an abandoned 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.

CCR 2022 1 | Page

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 City of Wellston PWS conducted sampling for bacteria, inorganic, radiological and volatile organic contaminants during 2022. Samples were collected for a total of 47 different contaminants most of which were not detected in the Wellston Water Works' 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**

During the Month of January and February, 2022 The City of Wellston failed to report to Electronic MOR. The Electronic MORs was signed by the current Operator of Record, J. David Lehew, prior to the official change by the Ohio EPA. To prevent this from occurring again, the proper paper work was filed and accepted by the Ohio EPA to make J. David Lehew the Operator of Record for our water system.

CCR 2022 2 | Page

# **Table of Detected Contaminants**

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

# **TABLE OF DETECTED CONTAMINANTS**

| Distribution System           |                          |     |                |                     |           |                 |   |  |  |
|-------------------------------|--------------------------|-----|----------------|---------------------|-----------|-----------------|---|--|--|
| Contaminants (units)          | MCLG                     | MCL | Level<br>Found | Range of Detections | Violation | Year<br>Sampled | Typical Source of<br>Contaminants               |  |  |
| Residual Disinfectar          | Residual Disinfectants   |     |                |                     |           |                 |   |  |  |
| Total Chlorine (ppm)          | MRDLG=4                  | 4   | 1.68           | 1.33 -<br>2.06      | No        | 2022            | Water additive used to control microbes.        |  |  |
| Disinfection By-Proc          | Disinfection By-Products |     |                |                     |           |                 |   |  |  |
| Haloacetic Acid<br>HAA5 (ppb) | N/A                      | 60  | 43.4           | 0 - 62.6            | No        | 2022            | By-product of<br>drinking water<br>chlorination |  |  |
| Trihalomethane<br>TTHMS (ppb) | N/A                      | 80  | 59.0           | 10.5 -<br>77.1      | No        | 2022            | By-product of<br>drinking water<br>chlorination |  |  |

| Lead and Copper         |                 |      |   |   |           |                 |  |  |  |
|-------------------------|-----------------|------|---|---|-----------|-----------------|--|--|--|
| Contaminants<br>(units) | Action<br>Level | MCLG | Individual<br>Results<br>over<br>the AL | 90% of<br>test<br>levels<br>were<br>less than | Violation | Year<br>Sampled | Typical Source of<br>Contaminants                                    |  |  |
| Lead (PPB)              | 15              | 0    | N/A                                     | <2.0  | No        | 2020            | Corrosion of household plumbing systems; erosion of natural deposits |  |  |
| Copper (PPM)            | 1.3             | 1.3  | N/A                                     | 0.068   | No        | 2020            | Corrosion of household plumbing systems; erosion of natural deposits |  |  |

CCR 2022 3 | Page

| North Plant                    |      |     |                |                     |           |                 |   |
|--------------------------------|------|-----|----------------|---------------------|-----------|-----------------|---|
| Contaminants<br>(units)        | MCLG | MCL | Level<br>Found | Range of Detections | Violation | Year<br>Sampled | Typical Source of<br>Contaminants   |
| Total Organic<br>Carbon (ppm)  | N/A  | П   | 2.5            | 1.9 - 3.8           | No        | 2022            | Naturally present in<br>the environment   |
| Turbidity (NTU)                | N/A  | TT  | 0.19           | 0.13 - 0.48         | No        | 2022            | Soil Runoff   |
| Turbidity (% meeting Standard) | N/A  | TT  | 100            | 99.4 - 100          | No        | 2022            | Turbidity Standard  |
| Inorganic                      |      |     |                |                     |           |                 |   |
| Barium (ppm)                   | 2    | 2   | 0.02           | N/A                 | No        | 2022            | Discharge of drilling<br>waste; discharge<br>from metal<br>refineries; erosion of<br>natural deposits                     |
| Fluoride (ppm)                 | 4    | 4   | 1.15           | N/A                 | No        | 2022            | Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate (ppm)                  | 10   | 10  | 0.2            | <0.10 -<br>0.2      | No        | 2022            | Runoff from fertilizer<br>use; leaching from<br>septic tanks, sewage;<br>erosion of natural<br>deposits                   |

CCR 2022 4 | Page

| South WTP                      |      |     |                |                        |           |                 |   |  |
|--------------------------------|------|-----|----------------|------------------------|-----------|-----------------|---|--|
| Contaminants<br>(units)        | MCLG | MCL | Level<br>Found | Range of<br>Detections | Violation | Year<br>Sampled | Typical Source of<br>Contaminants   |  |
| Total Organic<br>Carbon (ppm)  | N/A  | TT  | 0.9            | 0.7 - 1.3              | No        | 2022            | Naturally present in the environment  |  |
| Turbidity (NTU)                | N/A  | TT  | 0.24           | 0.11 - 0.37            | No        | 2022            | Soil Runoff   |  |
| Turbidity (% meeting Standard) | N/A  | ТТ  | 100            | 99.7 - 100             | No        | 2022            | Turbidity Standard  |  |
| Inorganic                      |      |     |                |                        |           |                 |   |  |
| Barium (ppm)                   | 2    | 2   | 0.012          | N/A                    | No        | 2022            | Discharge of drilling<br>waste; discharge from<br>metal refineries;<br>erosion of natural<br>deposits                                       |  |
| Fluoride (ppm)                 | 4    | 4   | 0.164          | N/A                    | No        | 2022            | Erosion of natural<br>deposits; Water<br>additive which<br>promotes strong teeth;<br>discharge from<br>fertilizer and aluminum<br>factories |  |

CCR 2022 5 | Page

# **Table of Unregulated Contaminants**

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 2022 the City of Wellston Water Works participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). The following table contains information on contaminants that were detected during UCMR4 sampling. For a copy of all results please call David Lehew at 740-384-6274.

## **TABLE OF UNREGULATED CONTAMINANTS**

| North Plant          | _              |                        |                        |                 |
|----------------------|----------------|------------------------|------------------------|-----------------|
| Contaminants (units) | Sample<br>Year | Average Level<br>Found | Range of<br>Detections | Sample Location |
| Manganese (ppm)      | 2022           | 0.017                  | <0.010 - 0.12          | Entry Point     |
| South Plant          |                |                        |                        |                 |
| Contaminants (units) | Sample<br>Year | Average Level<br>Found | Range of<br>Detections | Sample Location |
| Manganese (ppm)      | 2022           | 0.001                  | <0.010 - 0.013         | Entry Point     |

CCR 2022 6 | Page

# **Total Organic Carbon (TOC) Compliance Calculation**

Listed below is information on TOC that was found in the City of Wellston Water Works drinking water.

## North Plant

| Contaminant    | MCL | Level<br>Found | Range of<br>Monthly<br>Ratios | Violation | Year<br>Sampled | Typical Source of<br>Contaminants    |
|----------------|-----|----------------|-------------------------------|-----------|-----------------|--------------------------------------|
| TOC Compliance | TT  | 1.0            | 1.0 - 1.06                    | No        | 2022            | Naturally present in the environment |

## South Plant

| Contaminant    | MCL | Level<br>Found | Range of<br>Monthly<br>Ratios | Violation | Year<br>Sampled | Typical Source of<br>Contaminants    |
|----------------|-----|----------------|-------------------------------|-----------|-----------------|--------------------------------------|
| TOC Compliance | TT  | 1.0            | 1.0 – 1.78                    | No        | 2022            | 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 of 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.

CCR 2022 7 | Page

## **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 City of Wellston Water Works highest recorded turbidity result for 2022 was 0.480 NTU and lowest monthly percentage of samples meeting the turbidity limits was 99.4%.

## **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. The City of Wellston Water Works 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 2022 The Wellston City PWS 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 The 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.

CCR 2022 8 | Page

## 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

CCR 2022 9 | Page

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

CCR 2022 10 | Page