

Drinking Water Consumer Confidence Report (CCR)

2022

JCWSD Service Area
M, PHKE, and B-1
OEPA PWS ID OH4101103

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JEFFERSON COUNTY WATER AND SEWER DISTRICT

For Service Area M, PHKE, and B-1 (OEPA PWS ID OH4101103)

Drinking Water Consumer Confidence Report For 2022

Section 2: Introduction

The Jefferson County Water and Sewer District (JCWSD) 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.

Section 3: Source Water Information

The JCWSD does not own a water treatment plant. Therefore, it must purchase all the water it delivers to its customers from various suppliers. The vast network of pipelines, storage tanks, and booster pump stations used to distribute water by the JCWSD are divided into different service areas. The 2022 water supplier(s) for Service Area M was:

| SERVICE AREA | SUPPLIER |
|--------------------------------|--|
| <i>M, PHKE, and B-1</i> | <i>City of Toronto Water Department</i> |

The source of water for the City of Toronto Water Department is the Ohio River at mile mark 59.2, which is a surface water source. The Ohio EPA has conducted a Source Water Assessment of this source. For information on how to obtain a copy of this report please contact the Toronto Water Department at 740-537-2951 or the Jefferson County Water and Sewer District at 740-283-8577.

The Jefferson County Water and Sewer District’s B-1, M, PHKE Water System also has a back-up connection with the City of Steubenville Water Department. This connection has never needed to be used before, and therefore water from the City of Steubenville Water Department has never reached the taps of residents of the Jefferson County Water and Sewer District’s B-1, M, PHKE Water System. This report does not contain information on the water quality received from the City of Steubenville, but a copy of their consumer confidence report can be obtained by contacting the Steubenville Water Department at (740) 283-6041.

- **Source Water Assessment and its availability**

"All surface waters are considered to be susceptible to contamination. By their nature surface waters are accessible and can be readily contaminated by pathogens and chemicals, with relatively short travel times from the source to the intake. Based on the information compiled for this assessment, the Toronto source water is considered highly susceptible to contamination [from municipal waste water treatment discharges, industrial waste water discharges, home sewage disposal system discharges, air contamination deposition, combined sewer overflows, runoff from urban, residential, mining, and agricultural areas, oil and gas production and transportation, and accidental releases and spills from rail and vehicular traffic as well as from commercial shipping operations and recreational boating]. It is important to note that this assessment is based on available data, and therefore may not reflect current conditions in all cases. Water quality, land uses and other activities that are potential sources of contamination may change with time. While the source water for Toronto is considered susceptible to contamination, historically, the Toronto Public Water System has effectively treated this source water to meet drinking water quality standards".



Section 4: What are the sources of contamination to drinking water?

The sources of 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by the 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 health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Section 5: 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 for 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).

Section 6: About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The JCWSD and the City of Toronto Water Department conducted sampling for bacteria, inorganic, and volatile organic contaminants during 2022. 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, therefore some of the results may predate 2022.

Section 7: Monitoring & Reporting Violations & Enforcement Actions

The JCWSD was in violation for failing to include the Unregulated Contamination Monitoring Rule (UCMR) in the 2019 Consumer Confidence Report. This issue has been addressed by including the necessary information within this year's report.



Section 8A: Tables of Detected Contaminants

Listed below is information on those contaminants that were found in the JCWSD Water System as the result of monitoring by the JCWSD and City of Toronto Water Department. (Contaminants sampled by the JCWSD are marked with an *).

| Contaminants (Units) | MCLG | MCL | Level Found | Range of Detections | Violation | Sample Year | Typical Source of Contaminants |
|--|-------------------|--------------------------------|-----------------------------------|---------------------|--------------|--|---|
| Residual Disinfectants * | | | | | | | |
| Chlorine (as CL2) (ppm) * | MRDLG = 4 | MRDL = 4 | 0.946 | 0.75-1.17 | No | 2022 | Water additive used to control microbes |
| Disinfectant and Disinfectant By-Products * | | | | | | | |
| Haloacetic Acids (HAA5) (ppb) * | N/A | 60 | 16.6 | 9.5 – 24.7 | No | 2022 | By-product of drinking water disinfection |
| Total Trihalomethanes (TTHM) (ppb) * | N/A | 80 | 65.75 | 19.2-106 | No | 2022 | By-product of drinking water disinfection |
| Lead and Copper * | | | | | | | |
| Contaminants (units) | Action Level (AL) | Individual Results over the AL | 90% of test levels were less than | Violation | Year Sampled | Typical source of Contaminants | |
| Lead (ppb) * | 15 ppb | 0 | 0 ppb | No | 2020 | Corrosion of household plumbing systems; 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) * | 1.3 ppm | 0 | 0 ppm | No | 2020 | Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems | |
| | | | | | | 0 out of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm. | |



| 2022 Table of Detected Contaminants City of Toronto Water Department | | | | | | | |
|---|------|-----|-------------|---------------------|-----------|-------------|--|
| Contaminants (Units) | MCLG | MCL | Level Found | Range of Detections | Violation | Sample Year | Typical Source of Contaminants |
| Inorganic Contaminants | | | | | | | |
| Nitrate (ppm) | 10 | 10 | 1.00 | 0.7 –1.35 | No | 2022 | Runoff from fertilizer use; erosion of natural deposits. |
| Barium (ppm) | 2 | 2 | 0.0031 | NA | No | 2022 | Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits. |
| Fluoride (ppm) | 4 | 4 | 1.06 | 0.96-1.06 | No | 2022 | Water additive, which promotes strong teeth; erosion of natural deposits |
| Bacteriological | | | | | | | |
| Turbidity (NTU) | NA | TT | 0.03 | 0.03-0.08 | No | 2022 | Soil Runoff |
| Turbidity (% samples meeting standard) | NA | TT | 100 | 100 | No | 2022 | |
| Total Organic Carbon | NA | TT | 3.62 | 3.62-4.31 | No | 2022 | Naturally present in the environment |

Section 8B: Table of Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standard. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether further regulation is warranted. In 2019, the Jefferson County Water and Sewer District’s B-1, M, PHKE Water System participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). These results can be found on the EPA’s website at <https://www.epa.gov/sites/production/files/2018-10/documents/ucmr4-data-summary.pdf>. The Jefferson County Water and Sewer District’s B-1, M, PHKE Water System did not take any samples in 2022.

Listed below is information on those unregulated contaminants that were found in the JCWSD Water System as the result of monitoring by the City of Toronto Water Department and the JCWSD. (Contaminants sampled by the JCWSD are marked with an *.)

| Contaminants (units) | Sample Year | Average Level Found | Sample Location |
|----------------------|-------------|---------------------|------------------------------------|
| Manganese (ppb)* | 2019 | 1.1245 | Entry point to distribution system |



Section 9: 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 daily samples and shall not exceed 1 NTU at any time. As reported above, the City of Toronto’s highest recorded turbidity result for 2022 was 0.08 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.

Section 10: Violations

For City of Toronto Water Department, there were no Reporting or Monitoring Violations reported in 2022.

For 2021, Jefferson County Water and Sewer District for Area M, was in violation of the Ohio Administrative Code (OAC) Rules 3745-96-01-04 for failure to comply with CCR Requirements. The following violation was noted:

- a) The 90th Percentile reported in the CCR for lead and/or copper was incorrect. For lead and copper the 90th percentile should be reported for the level found. The 90th percentile for copper should be 0 ppm, not 0.05 ppm. The 90th percentile for lead should be 0 ppb, not 5 ppb.

The above violations were revised, and corrected table for 2021 for Detected Contaminants (for lead and copper) can be seen below:

| Lead and Copper 2021* | | | | | | |
|-----------------------|---|--------------------------------|-----------------------------------|-----------|--------------|--|
| Contaminants (units) | Action Level (AL) | Individual Results over the AL | 90% of test levels were less than | Violation | Year Sampled | Typical source of Contaminants |
| Lead (ppb) * | 15 ppb | 0 | 0 ppb | No | 2020 | Corrosion of household plumbing systems; 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) * | 1.3 ppm | 0 | 0 ppm | No | 2020 | Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems |
| | 0 out of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm. | | | | | |

Section 11: Nitrate Educational Information

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should advice from your health care provider.

Section 13: 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. JCWSD and City of Toronto Water Department are 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>.

Section 14: Cryptosporidium Information

The City of Toronto monitored for Cryptosporidium in the Ohio River (source water) during 2019. Cryptosporidium was detected in 2 raw water samples of 9 collected from the source water. It was not detected in the finished water. Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring of source water and finished water indicated the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people are at greater risk of developing a life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to avoid infection.

Section 18: License to Operate (LTO) Status Information

The Jefferson County Water and Sewer District's B-1, M, PHKE Water System has a current, unconditional license to operate our water system.

Section 20: 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 Jefferson County Board of Commissioners which meets every Thursday morning at 9:00 AM at 301 Market Street, Steubenville, Ohio, 43952.

- **Obtaining more information:**

If you would like more information on your drinking water, you can contact Michael S. Eroshevich of the JCWSD at (740) 283 – 8577 or via email at meroshevich@jcwatersewer.com

Section 21: 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 levels (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.
- Parts per Million (ppms) 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 (ppbs) 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.
- 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.
- 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.



- 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.
- 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).
- The “>” symbol: A symbol which means “greater than”.