AKRON
Water Supply Bureau
Your Clean Water Resource

AKRON

AKRON WATER SUPPLY BUREAU

# DRINKING WATER
## CONSUMER CONFIDENCE REPORT
2022

DANIEL HORRIGAN
MAYOR, THE CITY OF AKRON

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# Safe Water Is Our Priority

### National Primary Drinking Water Regulation Compliance

Water provided by the Akron Water Supply Bureau meets the current United States Environmental Protection Agency (USEPA) and Ohio Environmental Protection Agency (OEPA) regulatory requirements by a wide margin.

### Water Source

Three impounding reservoirs take surface water from the Upper Cuyahoga River. Water is stored and released from Wendell R. LaDue Reservoir and East Branch Reservoir, both in Geauga County. These reservoirs supplement Lake Rockwell, located in Franklin Township, Portage County, 2.5 miles north of Kent, Ohio. Water from Lake Rockwell is treated at the nearby water supply plant, pumped 11 miles to Akron through three force mains into equalizing reservoirs and distributed to more than 80,000 households. Because 21 percent of the system is at higher elevations, eight districts are supplied by additional pump stations and tanks.

In the event of an emergency water supply loss, partial backup water supplies are available by connections to the water utilities of Kent, Hudson, Cleveland, Barberton, and Cuyahoga Falls. These backup water supplies were not utilized in 2022.

### Source Water Contamination

While the source water for the City of Akron Public Water System is considered susceptible to contamination, historically, the City of Akron Public Water System has effectively treated this source water to meet drinking water quality standards.

An assessment of our source water susceptibility to contamination was completed by Ohio in 2003, and determined that our source water has a moderate susceptibility. Potential sources of contamination include agricultural runoff, failing on-site wastewater treatment systems (septic systems), municipal wastewater treatment discharges and non-point sources. In addition, the source water is susceptible to contamination through derailments, motor vehicle accidents or spills at sites where the corridor zone is crossed by roads and rail lines, or at fuel storage and vehicle service areas located adjacent to the corridor zone.

For more information about the report contact the Akron Watershed office at 330-678-0077. Since the EPA's assessment in 2003, Akron has taken further actions to strengthen the protection of its source water.

Please note that this assessment is based on available data and may not reflect current conditions. Water quality, land uses and other potential sources of contamination may change over time.

### Required Health Information

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 animal or 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.

### 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 one NTU at any time. The Akron Water Supply's highest recorded turbidity result for 2022 was 0.84 NTU and the lowest monthly percentage of samples meeting the turbidity limit was 99.8%.

# Definitions Of Some Terms Contained Within This Report

This report is based on the most recent testing done in accordance with the regulations by the Akron Water Supply Bureau. Terms used in the Water Quality Table and in other parts of this report are defined here.

**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 a 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 residual disinfectant level 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 residual 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 that a water system must follow.

**Threshold level:** The lead threshold level is exceeded at 0.015 milligrams per liter concentration of lead in an individual tap water sample.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**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.

**NTU (Nephelometric Turbidity Unit):** The units of measurement for turbidity in water as determined by the degree light is scattered at right angles when compared to a standard reference solution.

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

**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).

**NOT UNDER OHIO EPA REGULATION BUT OF GENERAL INTEREST**

| Parameter | Average Level Detected | Range |
|---|---|---|
| Alkalinity | 85 mg/L | 50 - 110 mg/L |
| Hardness (metric units) | 112 mg/L | 64 - 142 mg/L |
| Hardness (English units) | 7 grains per gallon | 4 - 8 grains per gallon |
| pH | 7.4 units | 7.16 - 7.76 units |
| Calcium | 30 mg/L | NA, one test, in 2022 |
| Magnesium | 6.98 mg/L | NA, one test, in 2022 |
| Manganese | 0.011 mg/L | 0.010 - 0.016 mg/L |
| Nickel | 2.89 ppb | NA, one test, in 2022 |
| Sodium | 56 mg/L | NA, one test, in 2022 |
| Temperature (metric units) | 13.9°C | 1.3°- 27.0°C |
| Temperature (English units) | 57°F | 34°- 81°F |
| Total Organic Carbon | 2.48 mg/L | 1.84 - 3.24 mg/L |
| Total Solids | 298 mg/L | NA, one test, in 2022 |

The EPA requires regular sampling to ensure drinking water safety. The City of Akron Water Supply Bureau conducted sampling for bacteria, inorganic, synthetic organic contaminants, and volatile organic contaminants in 2022. Samples were tested for 65 different contaminants, most of which were not detected in the Akron 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.

In 2022 The Akron Water Supply Bureau had an unconditional license to operate our water system. Listed below is information on those contaminants detected.

The complete listing of "2022 All Water Tests" performed on Akron drinking water is available at https://www.akronohio.gov/cms/Water/Consumer_Reports/index.html or call 330.678.0077.

**TABLE OF DETECTED CONTAMINANTS FOR 2022**

| Contaminants (units) | MCLG | MCL | Level Found | Range of Detections | Violation | Year Sampled | Typical Source of Contaminants |
|---|---|---|---|---|---|---|---|
| **Microbiological Contaminants** | | | | | | | |
| Turbidity (NTU) | NA | TT | 0.84 | 0.02 - 0.84 | NO | 2022 | Soil runoff. |
| Turbidity (% meeting standard) | NA | TT | 99.8% | 99.8% - 100% | NO | 2022 | |
| Total Organic Carbon (compliance ratio)* | NA | TT | 1.52 | 1.32 - 2.06 | NO | 2022 | Naturally present in the environment. |
| * The value reported under "Level Found" for Total Organic Carbon (TOC) compliance ratio is the lowest running annual average ratio between the percentage of TOC actually removed to the percentage of TOC 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 indicates a violation of the TOC removal requirements. The value reported under the "Range" for TOC is the lowest monthly ratio to the highest monthly ratio. | | | | | | | |
| **Radioactive Contaminants** | | | | | | | |
| Alpha emitters (picocuries per liter) | 0 | 15 | 1.1 | NA | NO | 2022 | Erosion of natural deposits. |
| Radium-228 (picocuries per liter) | 0 | 5 combined* | 0.6 | NA | NO | 2022 | Erosion of natural deposits. |
| * MCL is for Radium-226/228 combined. Only Radium-228 was tested in 2022. | | | | | | | |
| **Inorganic Contaminants** | | | | | | | |
| Barium (ppm) | 2 | 2 | 0.028 | NA | NO | 2022 | Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits. |
| Chlorite (ppm), avg. of 3 samples in the distribution system | 0.8 | 1.0 | 0.68 | 0.24 - 0.82 | NO | 2022 | By-product of drinking water chlorination. |
| Copper (ppm), plant tap | 1.3 | TT | 0.008 | 0.005 - 0.010 | NO | 2022 | Erosion of natural deposits. |
| Fluoride (ppm) | 4 | 4 | 1.04 | 0.74 - 1.2 | NO | 2022 | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate (ppm) | 10 | 10 | 0.46 | 0.04 - 0.46 | NO | 2022 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
| **Unregulated Volatile Organic Contaminants** | | | | | | | |
| Bromodichloromethane (ppb) | NA | NA | 7.21 | NA | NO | 2022 | By-product of drinking water chlorination. |
| Chloroform (ppb) | NA | NA | 19.7 | NA | NO | 2022 | |
| Dibromochloromethane (ppb) | NA | NA | 1.88 | NA | NO | 2022 | |
| **Disinfection Byproducts** | | | | | | | |
| Haloacetic Acids HAA5 (ppb) | NA | 60 | 49.7 | 15.9 - 57.0 | NO | 2022 | By-product of drinking water chlorination. |
| Total Trihalomethanes TTHMs (ppb) | NA | 80 | 69.5 | 25.7 - 86.3* | NO | 2022 | |
| * The maximum Range of Detections is not a violation because individual samples are averaged with other samples before being compared with the maximum contaminant level. | | | | | | | |
| **Residual Disinfectants** | | | | | | | |
| Total Chlorine (ppm) | MRDLG = 4 | MRDL = 4.0 | 1.27 | 0.93 - 1.65 | NO | 2022 | Water additive used to control microbes. |
| Chlorine Dioxide (ppb) | MRDLG = 800 | MRDL = 800 | 150 | 20 - 30 | NO | 2022 | |

| Contaminants (units) | Action Level | Individual Results over the AL | 90% of test levels were less than or equal to | Violation | Year Sampled | Typical Source of Contaminants |
|---|---|---|---|---|---|---|
| **Lead and Copper** | | | | | | |
| Copper (ppm), routine compliance, at customers' taps | 1.3 ppm | NA | 0.208 | NO | 2022 | Corrosion of household plumbing systems. Erosion of natural deposits. |
| | Zero out of 50 samples were found to have copper levels in excess of the copper Action Level of 1.3 ppm. | | | | | |
| Lead (ppb), routine compliance, at consumers' taps | 15 ppb | NA | 1.67 | NO | 2022 | Corrosion of household plumbing systems. Erosion of natural deposits. |
| | Zero out of 50 samples were found to have lead levels in excess of the lead Action Level of 15 ppb. | | | | | |

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 Akron Water Supply Bureau 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 3 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 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

Public participation and comments are welcome at Akron City Council ward meetings with the schedule available at https://www.akroncitycouncil.org/upcoming-meetings or phone 330-375-2256. You are welcome to contact Akron Water Supply regarding information in this report or other water questions using the email AkronWaterSupply@akronohio.gov or by a phone call to the Akron Water Plant at 330-678-0077.

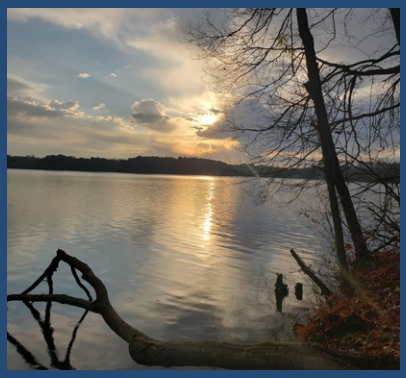
# Know Your Water

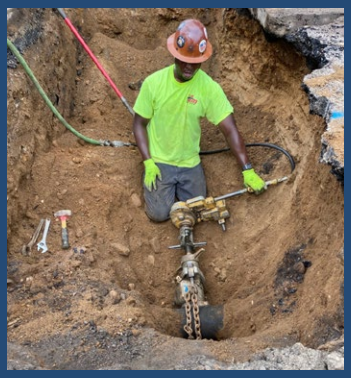
In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as people with cancer undergoing chemotherapy, people 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. USEPA/Centers for Disease Control and Prevention (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.





## Three Reasons You Can Count On the Akron Water Supply Bureau for ***Fresh, Clean Water***

### 1

### Watershed Protection

Our experts routinely inspect the water source to help ensure the water supply is clean and safe.

### 2

### Water Treatment

Our certified operating professionals provide an ample supply of high-quality drinking water while striving to exceed all regulatory requirements.

### 3

### 24/7 System Maintenance

A skilled team is available days, nights, weekends and holidays to maintain the water mains and reservoirs so you have water when you need it.

Akron Global Water Alliance℠

American Water Works Association

Water Research Foundation℠
advancing the science of water

# Akron's Lead Awareness Campaign

Akron is committed to delivering the highest quality water to each and every customer regardless of where you live and work. We provide outstanding corrosion control treatment and have been well below the USEPA Lead and Copper action levels for over 30 years. We annually monitor for Lead and Copper at homes that meet Tier 1 requirements (i.e., have Lead in their plumbing) just to make sure our treatment continues delivering expected results. Even though we have excellent results, Akron is committed to removing all lead service lines from our system through carefully planned replacements.

**"Clean Aerators, Flush, and Drink Cold"** are the actions all customers should implement to help ensure the highest quality of water is coming out of your tap, especially if there is the possibility of Lead in your plumbing system. In some situations, a water system repair/replacement may temporarily increase Lead levels in water and/or cause discoloration. As a standard practice the USEPA recommends these actions (clean aerators, flush, and drink cold) to reduce possible Lead exposure in drinking water. It is especially important to do this when water has been restored after a disruption of service such as a main break.

**CLEAN AERATORS** Clean all of your faucet aerator screens regularly. Small particles of solder and other material can accumulate in faucet aerators and in some circumstances can release Lead into the water. Aerators should be cleaned at least twice a year, and more frequently after work is done to your plumbing system. An easy way to remember is clean aerators when the time changes in Spring and Fall.

**FLUSH** Flush your cold water lines before consuming water when water has not been used for 6 or more hours. The goal is to have cold, fresh water from the main in the street come out of your tap before drinking and cooking. This helps ensure you have flushed away any water that may have contained Lead that leached from plumbing. To flush the plumbing, run water until you feel a temperature change then run water for an additional 30 seconds to 3 minutes. The time depends on the length and diameter of your service line. The farther your home is from the street, the longer you need to flush.

**DRINK COLD** Always use cold water for cooking, drinking and preparing baby formula. Hot water corrodes pipes faster and is more likely to contain Lead. If you need hot water for food or drinks, get water from the cold water tap and then heat the water.

**Learn more about our Lead Awareness Campaign.** We teach about Lead to meet a portion of the notification requirements in Ohio Administrative Code Rule 3745-83-02. Our education materials include information about Lead in drinking water, our treatment for corrosion control, and health information that can be found on our Lead webpage at www.akronohio.gov/cms/Water/Lead/index.html.

- To see what your service line is made of, scroll down this webpage to "service line interactive map" and enter your address.
- If you have questions related to our treatment process, email the Akron Water Supply at AkronWaterSupply@akronohio.gov
- Visit USEPA's website at www.epa.gov/lead or contact your health care provider for more information about Lead.

We are currently expanding our website to have even more up-to-date information, graphics, and additional ways you can protect your family from other sources of Lead. Look for these changes in the coming months!

**ADDITIONAL ACTIONS TO ADDRESS LEAD IN SERVICE LINES & PLUMBING**

**Replace lead service lines.** Service lines connect the water main in the street into your home/building. Akron Water has been proactively replacing the city-owned portion of lead service lines for over 80 years and have almost completely removed all of them. We hope to finish this monumental task in the next several years. We do not believe there are any lead service lines on the private portion owned by the homeowner. However, it appears galvanized steel pipe on the private portion may need to be removed in the future if it meets certain conditions. Therefore, if you replace your private-owned portion of the service line (usually due to a leak) and find it is either galvanized or lead, Akron Water will replace the City-owned portion free of charge if it is Lead.

**Identify and replace faucets containing lead.** Faucets made before 1986 can have unlimited lead inside; those that were made between 1986 and 2014 can have up to 8% lead inside.

**Report your service line material and volunteer your home.** Akron Water is actively seeking homeowners for future sampling and service line removal projects. If you have a lead or galvanized service line coming into your basement and/or would like to be considered for future sampling, send an email to AkronWaterSupply@akronohio.gov with your full contact information and a picture of your service line where it enters your home by your water meter.

**Boiling your water will NOT reduce lead.** Boiling water is used to kill pathogens. If lead is present, water evaporated during boiling will concentrate metals such as lead.

# Lead And Copper Monitoring

Akron Water regularly monitors for lead and copper from homes in the Akron Water distribution system that meet Tier 1 requirements (i.e. have lead in their plumbing system). The results shown our most recent compliance testing from water samples taken June - September 2022 continue being below the lead and copper action levels with no violations.

Akron Water's monitoring results have always been lower than the federal action level for lead of 15 parts per billion (ppb) since inception in 1991. The low lead levels are a direct result of our water's consistency and successful implementation of treatment techniques to prevent corrosion. These optimizations include adding zinc orthophosphate to finished water and keeping the pH of water above 7 at all times. The zinc orthophosphate forms a thin coating on the inside of pipes which limits water's contact with metals.

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