# 2025 City of Topeka
## Annual Water Quality Report Covering Calendar Year 2024

This report is a snapshot of the quality of the water we provided last year. It includes details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. For more water quality information, visit the EPA website at http://water.epa.gov/drink/ or the City of Topeka at https://www.topeka.org/utilities/drinking-water-quality/. You are invited to attend a water quality meeting on August 6, 2025, at 6 pm at 620 SE Madison St. For special accommodations, call 785-368-0943 or TTY 785-368-3603 8 am - 5 pm by August 1, 2025. For any questions related to water quality, please contact Katie Tietsort at 785-368-0943.

The City of Topeka withdraws water from the Kansas River using two intakes on the south bank. The intakes are capable of pumping up to 110 million gallons of untreated water per day and Topeka consumes an average of 21 million gallons per day. Contaminants may be present in the source water before it is treated. These contaminants may 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 occur naturally or result from 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 storm water runoff, agriculture and residential users. Radioactive contaminants, which can occur naturally or result from mining activity. Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, may come from gas stations, urban storm water runoff and septic systems. In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) provides regulations which limit the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations.

During the 2024 calendar year, the City of Topeka met all drinking water standards.

| Compliance Period | Comments |
|---|---|
| Jan- Dec 2024 | No Violations Occurred in the Calendar Year of 2024 |

At the City of Topeka water treatment plant, we operate the system and monitor the water quality twenty-four hours per day and seven days per week, every day of the year. We utilize conventional water treatment, which includes coagulation, flocculation, sedimentation, disinfection, and filtration. Once the water is pumped from the Kansas River over to the plant, we add polymer as the water flows into the pre-sedimentation basins. After that, the water moves through several basins called primary and secondary lime basins where chlorine is added for disinfection and where aluminum sulfate (alum) and lime are added to adjust the water chemistry. Throughout these basins, small particles clump together forming larger particles (flocculation), which eventually settle out and are removed (sedimentation). We also add ammonia to form chloramines, which complete the disinfection. Carbon dioxide is added to stabilize the softened water and adjust the pH, as well as phosphate, to protect pipes from corrosion. Finally, water enters the filtration process. The water is filtered through dual layers of sand and anthracite in large, indoor beds and then moves into the below-ground clear-wells that feed the water towers. Water towers provide the supply to meet demands of water users throughout the city. We monitor the quality of water in the Kansas River and make appropriate chemical and plant process changes to produce drinking water that meets or exceeds water quality standards on a continual basis.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 infections. These people should seek advice about drinking water from their health care providers.

The sources of drinking water (both tap and bottled water) include rivers, lakes, 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. 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline (1-800-426-4791). Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (1-800-426-4791). *Cryptosporidium* is a microbial parasite found in surface water throughout the United States. Although filtration removes *Cryptosporidium,* the most commonly used filtration cannot guarantee 100% removal. Monitoring of our source water indicates the presence of these organisms. Current test methods do not allow 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, immuno-compromised individuals are encouraged to consult their doctor regarding precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may spread through other means than drinking water.

Our water system collects and tests a minimum of 100 samples per month in accordance with the Revised Total Coliform Rule (RTCR) for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If limits are exceeded, the water supplier must notify the public.

**There is no safe level of lead in drinking water.** Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or worsen existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these negative health effects. Adults can have increased risks of heart disease, high blood pressure, and kidney or nervous system problems. 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. Your water system is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of material used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute (ANSI) accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact the City of Topeka Water Utility at 785-368-0943. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead. The Revised Lead and Copper Rule requires water systems to develop and maintain a Service Line Inventory. The service line is the underground pipe that supplies your home or building with water. To view the Service Line Inventory, which lists the material type(s) for your location, you may view the inventory at www.topeka.org/utilities/drinking-water-quality under the Topeka's LCRI Compliance tab or use this QR code.

The following tables list all of the drinking water contaminants which were detected during the 2024 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from testing done January 1 - December 31, 2024. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

**The bottom line is that the water that is provided to you is safe.**

Disponible en el Español. Teléfono 785-368-3111. Sitio Web de Internet https://www.topeka.org/utilities/drinking-water-quality/.

# 2024 Summary of Detected Contaminants in City of Topeka Water

## REGULATED CONTAMINANTS

| Contaminant | Level Detected | Unit of Measure | MCL | MCLG | Date | Likely Source of Contamination |
|---|---|---|---|---|---|---|
| ***Inorganic Contaminants*** | | | | | | |
| Barium | 48 | PPB | 2000 | 2000 | 5/20/24 | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Fluoride | 0.47 (Range 0.35 - 0.60) | PPM | 4 | 4 | Jan - Dec 2024 | Water additive which promotes strong teeth. |
| Nitrate | 1.3 (Range 0.62 - 1.3) | PPM | 10 | 10 | 5/20/24 6/17/24 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
| Selenium | 1.2 | PPB | 50 | 50 | 5/20/24 | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines. |
| Copper (90 percentile)<br>Range | 0.0324<br>0.0025 - 0.045<br>0 | PPM | AL = 1.3 | 1.3 | Jun - Aug; Nov *2023 | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives. |
| Lead (90 percentile)<br>Range<br>Number above AL | 2.4<br>0 - 6.0<br>0 | PPB | AL = 15 | 0 | Jun - Aug; Nov *2023 | Corrosion of household plumbing systems; Erosion of natural deposits. |

*Our system has monitored for copper and lead in specific homes identified with lead pipe or copper pipe with lead solder since 1992. Due to the low levels detected and because concentrations are not expected to vary significantly from year to year, the State requires us to monitor these homes only once every three years.

| | | | | | | |
|---|---|---|---|---|---|---|
| ***Organic Contaminants*** | | | | | | |
| Atrazine | 1.06 (0.14 - 1.8) | PPB | 3 | 3 | Jan - Dec 2024 | Runoff from herbicide used on row crops. |
| Chloramine | 3.3 (MPA = 3.60) | PPM | MRDL MPA = 4 | MRDLG = 4 | Jan - Dec 2024 | Water additive used to control microbes. |
| Haloacetic Acids* (HAA5) | 43 (Range 10 - 64.2) | PPB | LRAA= 60 | N/A | Jan - Dec 2024 | By-product of drinking water disinfection. |
| Trihalomethanes (TTHM) | 55 (Range 32.6 - 69.1) | PPB | LRAA= 80 | N/A | Jan - Dec 2024 | By-product of drinking water chlorination. |

*Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

| | | | | | | |
|---|---|---|---|---|---|---|
| ***Microbiological Contaminants*** | | | | | | |
| Total Coliform Bacteria | * 0.97% (Range 0.0% - 0.97%) | % | <5% of Monthly Samples | 0 | Jan - Dec 2024 | Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. |
| Total Organic Carbon** | 1.74 (Range 0.99 - 2.22) | Ratio | Removal Ratio TT > 1.0 | N/A | Jan - Dec 2024 | Naturally Present in the environment. |
| Turbidity | ***100% (Range 0.021 - 0.29 NTU) | NTU | TT=< 0.3 NTU 95% of time. TT= 1 NTU Maximum. | N/A | Jan - Dec 2024 | Soil runoff. Turbidity is a measure of cloudiness in the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. |

* March ** Total organic carbon (TOC) has no health effects. However, TOC provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk in getting cancer. *** Lowest Monthly %< 0.30 NTU.

## SECONDARY UNREGULATED CONTAMINANTS

| Contaminant | Level Detected | Range | Unit of Measure | Date |
|---|---|---|---|---|
| Aluminum | 0.051 | N/A | PPM | 5/20/24 |
| Calcium | 42 | N/A | PPM | 5/20/24 |
| Chloride | 44 | N/A | PPM | 5/20/24 |
| Magnesium | 5.0 | N/A | PPM | 5/20/24 |
| Metolachlor | 1.3 | N/A | PPB | 5/20/24 |
| Potassium | 6.9 | N/A | PPM | 5/20/24 |
| Silica | 3.6 | N/A | PPM | 5/20/24 |
| Sodium | 39 | N/A | PPM | 5/20/24 |
| Sulfate | 67 | N/A | PPM | 5/20/24 |
| TDS | 250 | N/A | PPM | 5/20/24 |
| Total Phosphorus (as P) | 0.63 | N/A | PPM | 5/20/24 |
| pH | 9.5 | 9.2 - 9.8 | pH unit | Jan - Dec 2024 |
| Specific Conductance | 632 | 330-842 | umhos/cm | |
| Total Alkalinity (as CaCO3) | 84 | 62 - 125 | PPM | |
| Total Hardness (as CaCO3) | 154 | 116 - 208 | PPM | |

The likely source of contamination for most secondary contaminants is erosion of natural deposits. The most likely source of contamination for Metolachlor is runoff from herbicide used on row crops.

**RAA (Running Annual Average):** Average of sample results obtained over the most current 12 months and used to determine compliance with MCL.

**umhos/cm (Micro-mhos Per Centimeter):** A measurement of the ability of a solution to conduct electrical current.

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

**Contaminant:** Any physical, chemical, biological, or radiological substance or matter in water.
**Herbicide:** An agent used to destroy or inhibit plant growth.
**Pesticide:** An agent used to destroy pests.

### Definitions of Terms and Abbreviations

**AL (Action Limit):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**LRAA (Locational Running Annual Average):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close the MCLG as feasible using the best available technology.

**MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**MPA (Monitoring Period Average):** An average of sample results obtained during a defined time frame (e.g. monthly, quarterly and yearly.

**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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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.

**N/A (Not Applicable)** | **N.D. (Not Detected)**

**NTU (Nephelometric Turbidity Units**): A measurement of water cloudiness.

**PPB (Parts Per Billion):** Micrograms per liter.

**PPM (Parts Per Million):** Milligrams per liter.