

Contact Us

Water Processing

 (913) 573-9272

Customer Service

 (913) 573-9000

 custservice@bpu.com

Water Issues

 (913) 573-9622

Electric Issues

 (913) 573-9522



Environmental Protection Agency

Safe Drinking Water Hotline

 (800) 426-4791

 www.epa.gov/safewater

Kansas Dept. of Health & Environment

Bureau of Water

 (785) 296-5500

 www.kdheks.gov/water/

Kansas City Board of Public Utilities

540 Minnesota Avenue
Kansas City, Kansas 66101

(913) 573-9000
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2025 Water Quality Report



Commitment to Quality and Service

For over 100 years, the BPU Water Division has delivered safe, high-quality water to our community. Our mission is to provide reliable water service as efficiently as possible—and that commitment continues today.

BPU is among the top-rated public water utilities in the country. We've earned the Partnership for Safe Water Directors Award, a distinction held by fewer than one percent of utilities nationwide, and were the first in the metro area to receive it. This award recognizes utilities that voluntarily exceed federal water quality standards.

We've also received the Platinum Award for Utility Excellence from the Association of Metropolitan Water Agencies, honoring our efforts to meet customer and community expectations through strong performance and innovation.

We hope this report reflects our continued dedication to water quality and service excellence.

Your Water, From Source to Tap

The Kansas City Board of Public Utilities (BPU) provides drinking water to more than 51,000 customers across a 152-square-mile service area, including Kansas City, Kansas, Edwardsville, parts of Bonner Springs, southern Leavenworth County, and a portion of northern Johnson County.

BPU's modern water system include:



One advanced treatment facility (Nearman Water Treatment Plant, opened in 2000)



Two of the nation's largest horizontal collector wells



Three major pump stations



The capacity to pump up to 72 million gallons of water per day



Over 1,000 miles of underground pipes

Our drinking water comes from the Missouri River watershed, a source that spans nearly one-sixth of the continental United States. Water is drawn from deep below the river through collector wells, then cleaned, treated, and tested to meet or exceed all federal and state regulations before reaching your tap.

This annual report provides information about your water quality and explains how BPU meets health-based standards set by the Safe Drinking Water Act. We also maintain interconnections with neighboring water systems, including Kansas City, Missouri, and Johnson County WaterOne, which also draw from the Missouri River.

To learn more:

- Visit www.bpu.com or the EPA's website at www.epa.gov/safewater
- Attend a BPU Board meeting (typically held at 6:00 p.m. on the first Wednesday of each month at 540 Minnesota Ave, Kansas City, KS)
- Call (913) 573-9284 with questions about BPU water quality

BPU’s water quality consistently exceeds all federal and state standards. We follow strict monitoring procedures from source to tap, overseen by the Kansas Department of Health and Environment (KDHE), which ensures compliance with regulations, monitoring schedules, and reporting requirements. BPU’s laboratory, certified by the State of Kansas, monitors the physical, chemical, and microbiological characteristics of the water supply. Our Nearman Water Treatment Plant operating staff is also state–certified by KDHE. Our water system is required to test a minimum of 120 samples per month in accordance with the Revised Total Coliform Rule 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 this limit is exceeded, the water supplier must notify the public.

To produce the highest quality drinking water, BPU uses advanced treatment methods to remove sediment, harmful bacteria, protozoan parasites, and certain minerals, supported by continuous testing with sophisticated equipment and procedures.

Are Cryptosporidium and Giardia in my tap water?

No. These organisms have never been detected in BPU’s treated water. Our water treatment process uses multiple barriers to prevent the presence of protozoan parasites in finished drinking water.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno–compromised persons such as individuals with cancer undergoing chemotherapy, persons who have undergone an organ transplant, people with HIV/AIDS or other immune system disorders, and some elderly persons and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers.

For additional information, the EPA’s Safe Drinking Water Hotline provides guidelines to reduce the risk of infection from Cryptosporidium and other microbiological contaminants. For more information, call (800) 426-4791 or visit www.epa.gov/safewater.

Regulations for public water systems

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 EPA’s Safe Drinking Water Hotline (800–426–4791) or visit their web site at www.epa.gov/safewater.

Contaminants that may be present in sources water before we treat it include: **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife. **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. **Pesticides and herbicides**, which may come from a variety of sources such as storm water run–off, agriculture, and residential users. **Radioactive contaminants**, which can be naturally occurring or the result of mining activity. **Organic contaminants**, including synthetic and volatile organic chemicals, which are by–products of industrial processes and petroleum production, and also come from gas stations, urban storm water run–off, and septic systems.

Laboratory Certification

BPU’s laboratory is nationally accredited under the National Environmental Laboratory Accreditation Program (NELAP), which implements the standards set by the National Environmental Laboratory Accreditation Conference (NELAC). NELAC is a cooperative association of state and federal agencies that establishes performance standards to ensure laboratories produce high–quality environmental data. This data serves as a reliable foundation for public health and environmental management decisions.

Water Quality Data

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 these tables are from the 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.*

Monitored Substances Tables

Monitored at Customer’s Tap							Monitored June – Sept. 2023 ¹
Substance	Units	MCL	MCLG	90th Percentile	Range Detected	Sites Over AL	Likely Source
Copper ¹	ppm	AL=1.3	1.3	0.480	0.073–0.710	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead ¹	ppm	AL=0.015	0	0.0075	<0.0005–0.0110	0	Corrosion of household plumbing systems, erosion of natural deposits

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 exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, 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. KANSAS CITY BOARD OF PUBLIC UTILITIES is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials 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 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 KANSAS CITY BOARD OF PUBLIC UTILITIES and Laboratory Services Division at 913-573-9284. 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 <https://www.bpu.com/ForHome/WaterService/ServiceLineInventory.aspx>.

Monitored in the Distribution System							Monitored Jan. – Dec. 2024
Substance	Units	MCL	MCLG	Average Detected	Highest RAA	Range Detected	Likely Source
Chloramines	ppm	4.0	4.0	2.54 ²	2.78	1.00–3.80	Water additive used to control microbes
Chlorite	ppm	1.0	0.8	0.44 ²	0.58	0.25–0.58	By–product of drinking water disinfection
HAA5 (Haloacetic acids)	ppb	60	N/A	17 ³	18	10–28	By–product of drinking water disinfection
Total Coliform	%	Presence <5% of Samples	0	1.02	NA	0 – 3.6	Naturally present in the environment
TTHM (Total Trihalomethanes)	ppb	80	N/A	32 ³	33	24–43	By–product of drinking water chlorination

Monitored at the Treatment Plant
Primary Drinking Water Contaminants

Monitored Jan. – Dec. 2024

Substance	Units	MCL	MCLG	Average Detected	Range Detected	Likely Source
Atrazine	ppb	3	3	0.093	<0.05–0.240	Runoff from herbicide used on row crops
Barium	ppm	2	2	0.120	0.100–0.130	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beta/photon emitters	pCi/L	50 ⁴	0	5.13	5.13	Decay of natural and man–made deposits
Chlorine dioxide	ppb	800	800	110	<100 – 290	Water additive used to control microbes
Chlorite	ppm	1.0	0.8	0.55 ²	0.42 – 0.70	By–product of drinking water disinfection
Cyanide	ppm	0.2	0.2	<0.025	<0.025	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	ppm	4	4	0.74	0.66– 0.83	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha emitters	pCi/L	15	0	5.31	5.31	Erosion of natural deposits
Nitrate (as N)	ppm	10	10	1.9	1.9	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radium 226	pCi/L	5	0	<1	<1	Erosion of natural deposits
Radium 228	pCi/L	5	0	<1	<1	Erosion of natural deposits
Selenium	ppb	50	50	<5	<5	Erosion of natural deposits
Total Organic Carbon	ratio ⁵	TT removal ratio >1	N/A	2.68 ⁵	2.00–3.25	Naturally present in the environment
Turbidity	NTU %	TT=1.0 max TT<0.3 95% of the time	N/A	0.06 100%	0.03–0.11 100%	Soil runoff causes water cloudiness by suspended matter

Definitions:

Action Level (AL) – the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

Maximum Contaminant Level (MCL) – the highest level of a contaminant allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal (MCLG—see below) as feasible, using the best available treatment technology.

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 Residual Disinfectant Level (MRDL) – the highest level of a disinfectant allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG) – the level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.

Micromhos per Centimeter (µmhos/cm) – a measure of the ability of water to carry electric current.

Nephelometric Turbidity Unit (NTU) – a measure of the clarity of water. Turbidity in excess of 5 NTUs is just noticeable to the average person.

Non–Detect (ND) – laboratory analysis indicates that the contaminant is not detected with present technology.

Not applicable (N/A) – the data does not apply for this contaminant and category.

Parts per Million (ppm) – one part per million corresponds to one minute in two years, or one grain of salt in six ounces of tomato juice. It is the same as milligrams per liter, mg/L.

Parts per Billion (ppb) – one part per billion corresponds to one minute in 2,000 years, or one grain of salt in 55 gallons of tomato juice. It is the same as micrograms per liter, µg/L.

Picocuries per Liter (pCi/L) – a measure of the radioactivity in water.

Running Annual Average (RAA)– an average of sample results obtained over the most current 12 months and used to determine compliance with MCL’s.

SMCL – Secondary Maximum Contaminant level (or optimal range) set by KDHE.

Standard Units (S.U.) – a measuring unit for pH, based on hydrogen ion concentration.

Treatment Technique (TT) – a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Questions about water quality?
Call (913) 573-9284 or email kdaggett@bpu.com

¹BPU tap water has had very low levels of copper and lead. For this reason, KDHE placed BPU on a reduced–monitoring frequency of once every three years. The data presented in the report are from the most recent testing done in accordance with the regulations.

²Annual Average ³Running Annual Average ⁴EPA considers 50 pCi/L to be the level of concern for beta particles. ⁵The monthly Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC rule removal requirements. The ratio shown is the average of the ratios for the 12 months of this reporting period.

Please Note: Because of sampling schedules, results may be older than 1 year

What is the Unregulated Contaminant Monitoring Rule (UCMR)?

As part of its responsibilities under the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (EPA) implements Section 1445(a)(2), Monitoring Program for Unregulated Contaminants. SDWA requires that once every five years, EPA issue a list of priority unregulated contaminants to be monitored by certain public water systems across States, Tribes, and Territories. This program enables water utilities like ours to proactively monitor for emerging contaminants and ensure compliance with evolving water quality standards.

To meet the requirements of the 5th UCMR testing (UCMR 5), quarterly samples were collected at the point of entry to the water distribution system and then analyzed for 29 per- and polyfluoroalkyl substances (PFAS) and lithium. We are pleased to report that none of the 29 PFAS compounds were detected in our samples and our lithium ranged from 50.7–55.3ug/L.

*Unregulated Contaminant Monitoring Rule Fifth Cycle (UCMR5) Sampling Period: January – December 2024				
Substance	Units	MRL	Average Detected	Range Detected
Lithium	ug/L	9.00	52.7	50.7–55.3

*Unregulated contaminant monitoring helps EPA determine where certain contaminants occur and whether the Agency should consider regulating those contaminants in the future.

Monitored at the Treatment Plant Secondary Drinking Water Contaminants					Monitored Jan. – Dec. 2024
Substance	Units	SMCL	Average Detected	Range Detected	
Alkalinity as CaCO3	ppm	NA	200	160–240	
Calcium	ppm	NA	73	60–84	
Chloride	ppm	250	28	28	
Specific Conductance	µmhos/cm	NA	810	650–870	
Total Hardness as CaCO3	ppm	NA	290	290	
Total Hardness as CaCO3	Grain/Gallon	NA	17.0	17.0	
Magnesium	ppm	NA	26	23–29	
Iron (Fe)	ppm	0.3	0.02	<0.01–0.09	
pH	S.U.	6.5–8.5	7.5	7.4–7.6	
O–Phosphate	ppm	NA	0.56	0.25–0.68	
Potassium	ppm	NA	6.7	5.1–9.0	
Silica	ppm	NA	14	12–16	
Sodium	ppm	NA	58	42–70	
Sulfate	ppm	250	160	160	
Total Dissolved Solids	ppm	500	470	470	
Metolachlor	ppb	NA	0.10	<0.05–0.33	

Secondary contaminants are not regulated, but provide guidelines for producing good tasting and aesthetically pleasing water.

Additional Required Health Effects Language:

Total Organic Carbon (TOC) has no health effects. However, total organic carbon 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 of getting cancer.

Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta particle and photon radioactivity in excess of the MCL over many years may have an increased risk of getting cancer.