2025 WATER QUALITY REPORT

Paducah Water is pleased to present this year's Annual Water Quality Report. Also known as the Consumer Confidence Report or CCR, this document is designed to inform the public about the quality of water and service Paducah Water delivered to its customers from January 1, 2024 through December 31, 2024.

Our commitment is to provide a safe, reliable supply of drinking water and we want to assure our customers that we will continue to monitor, improve and protect the water system in order to do so. In accordance with our Vision Statement, our team will always strive for excellence in serving the needs of our customers based upon high standards of integrity, competency and reliability, while continually improving ourselves and our product. This is our primary focus.

Jason Petersen, PE
General Manager

HOW TO OBTAIN THIS REPORT

The *Annual Water Quality Report* is mailed to only a few homes and businesses in our service area. It will be available online on June 1, 2025. Go to our website at pwwky.com and click on the Water Quality Report icon or type pwwky.com/ccr into your web browser. If you would like a paper copy of the Annual Report (CCR), please call, write, or stop by our business office.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo o hable con alguien que lo entienda bien.

PADUCAH WATER CONTACT INFORMATION

Public Water System ID: KY0730533
Agency Interest Number: 3061
System Manager: Jason Petersen, PE

Physical Address
1800 N. 8th Street
Paducah, KY 42001

Mailing Address
P.O. Box 2377
Paducah, KY 42002-2377

BOARD MEETINGS

The members of the Commissioners of Waterworks meet at 5:00 PM on the last Wednesday of each month. Meetings are held at the Paducah Water Business Office at the address listed above. Board meetings are open to the public.

To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Copies of this report are available upon request by contacting our office during business hours.

Regulated Contaminant Test Results			Paducah Water				
Contaminant *[code] (units)*	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Radioactive Contaminants							
Alpha emitters *[4000] (pCi/L)*	15	0	2.35	2.35 to 2.35	Apr-20	No	Erosion of natural deposits
Combined radium *(pCi/L)*	5	0	0.963	0.963 to 0.963	Apr-20	No	Erosion of natural deposits
Inorganic Contaminants							
Barium *[1010] (ppm)*	2	2	0.025	0.025 to 0.025	Jan-24	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride *[1025] (ppm)*	4	4	0.65	0.65 to 0.65	Jan-24	No	Water additive which promotes strong teeth
Nitrate *[1040] (ppm)*	10	10	0.482	0.482 to 0.482	Jan-24	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon *(ppm) (measured as ppm, but reported as a ratio)*	TT*	N/A	1.55 *(lowest average)*	1.28 to 2.06 *(monthly ratios)*	2024	No	Naturally present in environment
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.							
Chlorine *(ppm)*	MRDL = 4	MRDLG = 4	1.25 *(highest average)*	0.4 to 2.9	2024	No	Water additive used to control microbes
HAA *(ppb) (Stage 2) [Haloacetic acids]*	60	N/A	35 *(high site average)*	12.9 to 33.2 *(range of individual sites)*	2024	No	Byproduct of drinking water disinfection
TTHM *(ppb) (Stage 2) [total trihalomethanes]*	80	N/A	63 *(high site average)*	18.8 to 73.2 *(range of individual sites)*	2024	No	Byproduct of drinking water disinfection
Household Plumbing Contaminants							
Copper *[1022] (ppm)* sites exceeding action level 0	AL = 1.3	1.3	0.128 *(90th percentile)*	0.005 to 0.149	Sep-24	No	Corrosion of household plumbing systems
Lead *[1030] (ppb)* sites exceeding action level 0	AL = 15	0	0 *(90th percentile)*	0 to 9	Sep-24	No	Corrosion of household plumbing systems
Synthetic Organic Contaminants including Pesticides and Herbicides							
2 , 4-D *[2105] (ppb)*	70	70	0.1	0 to 0.1	2024	No	Runoff from herbicide used on row crops
Atrazine *[2050] (ppb)*	3	3	0.4	0 to 0.4	2024	No	Runoff from herbicide used on row crops
Dalapon *[2031] (ppb)*	200	200	1.1	0 to 1.1	2023	No	Runoff from herbicide used on rights of way
Other Constituents							
Turbidity (NTU) TT * Representative samples	Allowable Levels		Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity	
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples		0.09	100	No	Soil runoff	

	Average	Range of Detection
Sodium *(EPA guidance level = 20 mg/L)*	22.1	22.1 to 22.1

Unregulated Contaminants (UCMR 5)	Average	Range (ppb)	Date
perfluorobutanoic acid (PFBA)	0.002	0 to 0.0073	Aug-24
perfluorobutanesulfonic acid (PFBS)	0.002	0 to 0.0033	Feb-24
perfluorooctanesulfonic acid (PFOS)	0.005	0 to 0.0081	Aug-24
perfluorooctanoic acid (PFOA)	0.003	0 to 0.0058	Feb-24
perfluoropentanoic acid (PFPeA)	0.001	0 to 0.0046	Nov-24

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those that EPA has not established drinking water standards. There are no MCLs and therefore no violations if found. The purpose of monitoring for these contaminants is to help EPA determine where the contaminants occur and whether they should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact our office during normal business hours.

DEFINITIONS & ABBREVIATIONS

> Greater than

< Less than

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

Below Detection Level (BDL):
Laboratory analysis indicates that the contaminant is not present.

Locational Running Annual Average (LRAA):
The annual average of one monitoring location.

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 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. 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 a 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.

Nephelometric Turbidity Unit (NTU):
A measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Not Applicable (N/A):
Does not apply.

Parts per billion (ppb):
Micrograms per liter (Qg/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per million (ppm):
Milligrams per liter (mg/l). One part per million corresponds to one minute in two years or a single penny in $10,000.

Picocuries per liter (pCi/L):
A measure of the radioactivity in water.

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

WATER SOURCE: WHERE DOES MY WATER COME FROM?

The source of the water supply for Paducah Water customers is the Ohio River, under the influence of the Tennessee River. Rivers are considered to be surface water sources. A final source water assessment for this system has been completed and is contained in the Source Water Assessment and Protection Plan Susceptibility Analysis and Protection Recommendations for McCracken County. The completed plan is available for inspection and can be obtained at the Purchase Area Development District office at 270-247-7171. A summary of the susceptibility analysis is as follows: An analysis of the susceptibility of PW's water supply to contamination indicates that this susceptibility is generally high. There are numerous petroleum storage facilities along the Ohio and Tennessee Rivers that provide fuel to land and river transportation. Numerous bridges cross the Ohio and Tennessee Rivers, as well as major tributaries such as the Clarks River and Island Creek. These bridges are of greater concern due to the possibility of hazardous materials infiltrating the water source near the intake due to traffic accidents, structural collapse of the bridge, or illegal dumping. River traffic is a concern that has become more prevalent in the past few years due in part to accidents and collisions.

Paducah Water
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SOURCE WATER CONTAMINANTS

The sources of drinking water (both tap 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 may pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, (sewage plants, septic systems, livestock operations, or wildlife);
- **Inorganic contaminants**, such as salts and metals, (naturally occurring or from storm water runoff, wastewater discharges, oil and gas production, mining, or farming);
- **Pesticides and herbicides**, (storm water runoff, agriculture or residential uses);
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals (by-products of industrial processes and petroleum production, or from gas stations, storm water runoff, or septic systems);
- **Radioactive contaminants** (naturally occurring or from oil and gas production or mining activities).

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water to 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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (**800-426-4791**).

We are only required to test for some contaminants periodically, so the results listed in this report may not be from the previous year. Only detected contaminants are included in this report. For a list of all contaminants we test for please contact us. Copies of this report are available upon request by contacting our office.

(To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.)

SPECIAL HEALTH INFORMATION

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 of infections. 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 (**800-426-4791**).

TURBIDITY

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

IMPORTANT INFORMATION ABOUT LEAD

Lead can cause serious health effects in people of all ages, especially those who are pregnant, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and home plumbing. Paducah Water is responsible for providing high quality drinking water and removing lead pipes in the distribution system but cannot control the variety of materials used in the plumbing inside your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter that is certified by an American National Standards Institute accredited certifier to reduce lead is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or "galvanized requiring replacement" service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact our Water Quality Supervisor at **270-444-5572**. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available at **www.epa.gov/safewater/lead**.

SERVICE LINE INVENTORY

Per EPA's Lead and Copper Rule Revision (LCRR), every community water system across the country must develop and maintain an inventory of service line materials. Paducah Water has conducted an initial inventory of service lines in our system. If you would like to know PW's category for your service line, you can check our service line lookup tool online. Just go to **www.pwwky.com/lead-awareness-inventory** and enter your service address or account number. Please note that this information is updated periodically as we continue the inventory process and may not reflect our most recent data.