Russell Water Company Water Quality Report 2024

For previous reports include year.

Example: tapwaterinfo.com/2023/russell

Water System ID: KY0450376 Water Plant Superintendent: Hendrick Castle 606-836-6644 CCR Contact: Hendrick Castle

606-836-6644

Mailing Address: PO Box 394 Russell, KY 41169 Meeting location and time: Russell City Building Fourth Thursday monthly at 6:00 PM

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). 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-ina-million chance of having the described health effect.

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 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 stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater 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, stormwater 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. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

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 from 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).

Source Information:

We get our water from the Ohio River at mile marker 327.5. The Ohio River is surface water that drains a large area of several states in the eastern US. The land in the drainage basin is a mix of agriculture, industrial, urban and commercial properties. The analysis of the systems susceptibility to contamination indicates that the susceptibility rating is moderately high. Within the Kentucky portion of the protection zone there are 536 identified potential contaminant sources. Of these, 302 have a susceptibility rating of High, 206 are rated Medium and 28 are rated Low. Not all contaminants with a High rating threaten the water supply equally. Although the intake for Russell Water is on the Ohio River, it is 15 feet below the surface of the water. Oil spills may float by the intake without noticeable effect. The intake may be shut down if other types of spills threaten. In all cases, the Ohio River Valley Sanitation Commission (ORSANCO) issues notices of spills, their location and speed of the river to all water systems with intakes on the Ohio River. This warning network is in addition to Russell's interconnection with Ashland Water for backup supply. The complete Source Water Assessment Plan is available for inspection at the FIVCO Area Development District office located in the Industrial Park at 32 FIVCO Court, Grayson, Kentucky 41134.

Information About Lead:

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 local water system 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 your local water system. 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.

We are required to annually provide information about the health risks from lead in drinking water to schools and child care facilities. All elementary schools, secondary schools, and child care facilities are eligible to be sampled for lead by our water system. Contact our office for scheduling or to learn results of previous sampling.

Service Line Inventory Information:

To address lead in drinking water, EPA requires that all community water systems develop and Maintain an inventory of service line materials. We have completed a service line inventory (SLI) and it is available for review at our office or online at https://qrs.ly/y4gmtdm
You can also access the inventory by scanning the QR code (to the right) with your phone:

Lead Sample Results Availability Information:

We are required to periodically sample water from customer taps to determine lead and copper levels. EPA sets the lead action level at 0.015 mg/L (15 ppb). For a water system to be in compliance, at least 90% of tap water samples must have lead levels below this limit. This report contains the 90th percentile and range of our most recent sampling. The individual results for each location sampled can be reviewed at our office.

Some or all of these definitions may be found in this report:

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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

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

Parts per billion (ppb) - or micrograms per liter, (µg/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

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.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

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

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

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.

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those for which 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. Your water was tested for 30 unregulated contaminants, and none were detected. If you are interested in examining the results, please contact our office during normal business hours.

Violations

Testing results showed that our system exceeded the standard, or maximum contaminant level (MCL), for trihalomethanes. The standard for trihalomethanes is 0.080 mg/L. It is determined by averaging all samples at each sampling location for the last 12 months.

Trihalomethanes averaged at one of our system's locations for:

4/1/2024 through 6/30/2024 was 0.086 mg/L

6/1/2024 through 9/30/2024 was 0.082 mg/L

A Public Notification describing the violation was distributed to our customers at the time the violations occurred. We have since returned to compliance.

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.



Regulated Contaminan	t Test Re	sults	Ru	ssell Wa	ter C	ompa	any	y					
Contaminant				Report		R	lan	nge D		e of		Likely Source of	
[code] (units)	MCL	MCLG		Level		of Detection			Sample		Violation	Contamination	
Radioactive Contamina	ints				•						•		
Alpha emitters	15	0		2.61	2.6	1 t	О	2.61	May	-20	No	E : 6 . 11	
[4000] (pCi/L)												Erosion of natural deposits	
Combined radium	5	0		0.907	0.90	7 t	to 0.907 May-20 No		E : 0 . 11 :				
(pCi/L)												Erosion of natural deposits	
Inorganic Contaminant	s				•				-		•	•	
Barium													
[1010] (ppm)	2	2		0.036	0.03	6 t	0	0.036	May	-24	No	Drilling wastes; metal refineries; erosion of natural deposits	
Fluoride													
[1025] (ppm)	4	4		0.62	0.62 to 0.62		May-24		No	Water additive which promotes strong teeth			
Nitrate												Fertilizer runoff; leaching from	
[1040] (ppm)	10	10		0.529	0.52	9 t	to 0.529 Sep-24 No septic		eptic tanks, sewage; erosion of atural deposits				
Disinfectants/Disinfecti	on Bypro	ducts and Pi	ecu	rsors					•		•		
Total Organic Carbon (ppm)				1.06									
(measured as ppm, but	TT*	N/A		(lowest	0.5	9 t	0	1.48	202	24	No	Naturally present in environment.	
reported as a ratio)				average)	(monthly ra		y ratios)						
*Monthly ratio is the % TOC ren	noval achieve	ed to the % TOC r	emov	al required.	Annual	averag	ge n	nust be 1.00 o	or greater	for co	npliance.		
Chlorine	MRDL MRDLG			1.16									
(ppm)	= 4	= 4		(highest	0.2	1 t	О	1.72	202	24	No	Water additive used to control microbes.	
				average)								microses.	
HAA (ppb) (Stage 2)				46								D 1 (C1:1:	
[Haloacetic acids]	60	N/A	(high site	19	19 to		65 202		24	No	Byproduct of drinking water disinfection	
			:	average)	(rang	ge of in	ndiv	vidual sites)					
TTHM (ppb) (Stage 2)				86								Drawn drast of dainleing restor	
[total trihalomethanes]	80	N/A	(high site	38	t	О	115	202	24	YES	Byproduct of drinking water disinfection.	
			:	average)	(rang	ge of in	ndiv	vidual sites)					
Household Plumbing C	ontamina	nts										1	
Copper (ppm) Round 1	AL=			0.102						Commarian of house 1-11 -1- 1			
sites exceeding action level	1.3	1.3		(90 th	0.00	5 t	О	0.172	Jun-24		No	Corrosion of household plumbing systems	
0			p	ercentile)									
Lead (ppb) Round 1	AL=			3								Compaign of horsest and also 1	
sites exceeding action level	15	0		(90 th		0 to		8	Jun-24		No	Corrosion of household plumbing systems	
0			p	ercentile)								5,5551115	
Other Constituents			,										
Turbidity (NTU) TT	Al	lowable	Hi	ghest Single	e	;		Lowest	Viola	tion			
* Representative samples	1	Levels	Measurement		t			Monthly %			Likely So	ource of Turbidity	
Turbidity is a measure of the	No more tha	an 1 NTU*											
clarity of the water and not a contaminant.	Less than 0.3 NTU in			0.22				100	No		Soil runoff		
	95% of mor	nthly samples											
				Average		R		ge of Detec	tion				
Fluoride (added for der	ntal healt	h)		0.8		0.59 to		to (
Sodium (EPA guidance leve	el = 20 mg/l	L)		19.6					19.6	Ī			
, 8 ,										↓			

cr zomg/z/	17.	~	17.0	to	17.0	
	Report		Rang	Date o	f	
Maximum Allowable Level	Level	a	f Detec	Sample		
0.05 to 0.2 mg/l	0.05	0.05	to	0.05	May-24	4
250 mg/l	22.7	22.7	to	22.7	May-24	4
1.0 mg/l	0.003	0.003	to	0.003	May-24	4
Noncorrosive	-1.21	-1.21	to	-1.21	May-24	4
2.0 mg/l	0.64	0.64	to	0.64	May-24	4
3 threshold odor number	3	3	to	3	May-24	4
6.5 to 8.5	7.11	7.11	to	7.11	May-24	4
250 mg/l	53.3	53.3	to	53.3	May-24	4
500 mg/l	200	200	to	200	May-24	4
	Maximum Allowable Level 0.05 to 0.2 mg/l 250 mg/l 1.0 mg/l Noncorrosive 2.0 mg/l 3 threshold odor number 6.5 to 8.5 250 mg/l	Report	Report Level 0.05 0.05 0.05 0.05 0.05 0.05 0.20 mg/l 0.003 0.003 0.003 Noncorrosive -1.21 -1.21 2.0 mg/l 0.64 0.64 3 threshold odor number 3 3 3 0.5 to 8.5 7.11 7.11 250 mg/l 53.3 53.3	Maximum Allowable Level Level of Detection 0.05 to 0.2 mg/l 0.05 0.05 to 250 mg/l 22.7 22.7 to 1.0 mg/l 0.003 0.003 to Noncorrosive -1.21 -1.21 to 2.0 mg/l 0.64 to 0.64 to 3 threshold odor number 3 3 to 6.5 to 8.5 7.11 7.11 to 7.11 to 250 mg/l 53.3 53.3 to	Maximum Allowable Level Level of Detection 0.05 to 0.2 mg/l 0.05 0.05 to 0.05 250 mg/l 22.7 22.7 to 22.7 1.0 mg/l 0.003 0.003 to 0.003 Noncorrosive -1.21 -1.21 to -1.21 2.0 mg/l 0.64 0.64 to 0.64 3 threshold odor number 3 3 to 3 6.5 to 8.5 7.11 7.11 to 7.11 250 mg/l 53.3 53.3 to 53.3	Maximum Allowable Level Level of Detection Sampl 0.05 to 0.2 mg/l 0.05 0.05 to 0.05 to 0.05 May-2 250 mg/l 22.7 22.7 to 22.7 to 22.7 May-2 1.0 mg/l 0.003 0.003 to 0.003 to 0.003 May-2 Noncorrosive -1.21 -1.21 to -1.21 May-2 2.0 mg/l 0.64 0.64 to 0.64 May-2 3 threshold odor number 3 3 to 3 May-2 6.5 to 8.5 7.11 7.11 to 7.11 May-2 250 mg/l 53.3 53.3 to 53.3 May-2

Secondary contaminants do not have a direct impact on the health of consumers. They are being included to provide additional information about the quality of the water.