

2023 Consumer Confidence Report for Public Water System CITY OF CHILLICOTHE

This is your water quality report for January 1 to December 31, 2023

CITY OF CHILLICOTHE provides surface water and ground water from Seymour Aquifer located in Hardeman County. We Purchase water from Greenbelt MIWA located in Donley County.

For more information regarding this report contact:

Name _____ Nicky Richter _____

Phone _____ 940-852-5211 _____

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (_940_) _852_ - _5211_.

Definitions and Abbreviations

Definitions and Abbreviations

The following tables contain scientific terms and measures, some of which may require explanation.

Action Level:

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water svstem.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water svstem on multiple occasions.

Maximum Contaminant Level or 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 or 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 or 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 or 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.

MFL million fibers per liter (a measure of asbestos)

mrem: millirems per year (a measure of radiation absorbed by the body)

na: not applicable.

NTU nephelometric turbidity units (a measure of turbidity)

pCi/L picocuries per liter (a measure of radioactivity)

Definitions and Abbreviations

ppb:	micrograms per liter or parts per billion
ppm:	milligrams per liter or parts per million
ppq	parts per quadrillion, or picograms per liter (pg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Information about your Drinking Water

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 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 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 at (800) 426-4791.

Contaminants that may be present in source water 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 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 agriculture, urban storm water runoff, and residential uses.
- 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.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are responsible for providing high quality drinking water, but we 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 2 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 or at <http://www.epa.gov/safewater/lead>.

Information about Source Water

CITY OF CHILLICOTHE purchases water from GREENBELT MIWA. GREENBELT MIWA provides purchase surface water from [insert source name of aquifer, reservoir, and/or river] located in [insert name of County or City]. [insert a table containing any contaminant that was detected in the provider's water for this calendar year, unless that contaminant has been separately monitored in your water system (i.e. TTHM, HAAS, Lead and Copper, Coliforms)].

TCEQ completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact [insert water system contact][insert phone number]

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/12/2021	1.3	1.3	0.071	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	09/12/2021	0	15	2.1	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2023 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
--------------------------	-----------------	------------------------	-----------------------------	------	-----	-------	-----------	--------------------------------

Haloacetic Acids (HAAS)	2023	38	21.9 - 41.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
--------------------------------	------	----	-------------	-----------------------	----	-----	---	--

*The value in the Highest Level or Average Detected column is the highest average of all HAAS sample results collected at a location over a year

Total Trihalomethanes (TTHM)	2023	96	63.8 - 113	No goal for the total	80	ppb	Y	By-product of drinking water disinfection.
-------------------------------------	------	----	------------	-----------------------	----	-----	---	--

*The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	03/01/2022	2	1.9 - 2	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	03/01/2022	0.2	0.19 - 0.2	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	03/01/2022	3.5	0 - 3.5	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	03/23/2021	0.676	0.671 - 0.676	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2023	9	2.63 - 9.25	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	06/05/2018	6.1	0 - 6.1	0	50	pCi/L*	N	Decay of natural and man-made deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Gross alpha excluding radon and uranium	06/05/2018	3	3 - 3	0	15	pCi/L	N	Erosion of natural deposits.
--	------------	---	-------	---	----	-------	---	------------------------------

Uranium	06/05/2018	3	2.6 - 3	0	30	ug/l	N	Erosion of natural deposits.
---------	------------	---	---------	---	----	------	---	------------------------------

Disinfectant Residual

A blank disinfectant residual table has been added to the CCR template, you will need to add data to the fields. Your data can be taken off the Disinfectant Level Quarterly Operating Reports (DLQOR).

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chlorine Free and Chloramines 7.87	2023	1.97	0.37 to 5.7	4	4	MG/L	ppm	Water additive used to control microbes.

Violations

Chlorine			
Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR).	01/01/2023	03/31/2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Disinfectant Level Quarterly Operating Report (DLQOR).	10/01/2023	12/31/2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Total Trihalomethanes (TTHM)			
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.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	01/01/2023	03/31/2023	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	04/01/2023	06/30/2023	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	07/01/2023	09/30/2023	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

Violations

MCL, LRAA	10/01/2023	12/31/2023	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
-----------	------------	------------	--

Greenbelt MIWA TX0650013

Recent Primary/Secondary Sample Results

Fac./ Site	Sample No.	Date	An. Code	Analyte	Result	Unit	Method
EP001-TRT-TAP	Q2316824002	05-03-2023	1074	ANTIMONY, TOTAL	ND		200.8
EP001-TRT-TAP	Q2316824002	05-03-2023	1005	ARSENIC	0.0029	MG/L	200.8
EP001-TRT-TAP	Q2316824002	05-03-2023	1010	BARIUM	0.27	MG/L	200.8
EP001-TRT-TAP	Q2316824002	05-03-2023	1075	BERYLLIUM, TOTAL	ND		200.8
EP001-TRT-TAP	Q2316824002	05-03-2023	1015	CADMIUM	ND		200.8
EP001-TRT-TAP	Q2316824002	05-03-2023	1020	CHROMIUM	ND		200.8
EP001-TRT-TAP	Q2316824003	05-03-2023	1024	CYANIDE	ND		335.4
EP001-TRT-TAP	Q2316824001	05-03-2023	1025	FLUORIDE	0.945	MG/L	300.0
EP001-TRT-TAP	Q2316824002	05-03-2023	1035	MERCURY	ND		245.1
EP001-TRT-TAP	Q2316824002	05-03-2023	1036	NICKEL	0.0013	MG/L	200.8
EP001-TRT-TAP	Q2316824002	05-03-2023	1045	SELENIUM	ND		200.8
EP001-TRT-TAP	Q2316824002	05-03-2023	1085	THALLIUM, TOTAL	ND		200.8

Recent SOC Sample Results

Fac./ Site	Sample No.	Date	An. Code	Analyte	Result	Unit	Method
EP001-TRT-TAP	Q2227755002	09-15-2022	2110	2,4,5-TP	ND		515.4
EP001-TRT-TAP	Q2227755002	09-15-2022	2105	2,4-D	ND		515.4
EP001-TRT-TAP	Q2316824005	05-03-2023	2051	ALACHLOR	ND		525.2
EP001-TRT-TAP	Q2316824005	05-03-2023	2050	ATRAZINE	ND		525.2
EP001-TRT-TAP	Q2316824005	05-03-2023	2010	BHC-GAMMA	ND		525.2
EP001-TRT-TAP	Q2316824005	05-03-2023	2959	CHLORDANE	ND		508.1
EP001-TRT-TAP	Q2227755002	09-15-2022	2031	DALAPON	ND		515.4
EP001-TRT-TAP	Q2227755002	09-15-2022	2041	DINOSEB	ND		515.4
EP001-TRT-TAP	Q2316824005	05-03-2023	2005	ENDRIN	ND		525.2
EP001-TRT-TAP	Q2316824005	05-03-2023	2065	HEPTACHLOR	ND		525.2
EP001-TRT-TAP	Q2316824005	05-03-2023	2067	HEPTACHLOR EPOXIDE	ND		525.2
EP001-TRT-TAP	Q2316824005	05-03-2023	2015	METHOXYCHLOR	ND		525.2
EP001-TRT-TAP	Q2227755002	09-15-2022	2326	PENTACHLOROPHENOL	ND		515.4
EP001-TRT-TAP	Q2227755002	09-15-2022	2040	PICLORAM	ND		515.4
EP001-TRT-TAP	Q2316824005	05-03-2023	2037	SIMAZINE	ND		525.2
EP001-TRT-TAP	Q2316824005	05-03-2023	2020	TOXAPHENE	ND		508.1

Recent RVOC Sample Results

Fac./ Site	Sample No.	Date	An. Code	Analyte	Result	Unit	Method
EP001-TRT-TAP	Q2339388001	09-13-2023	2981	1,1,1-TRICHLOROETHANE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2985	1,1,2-TRICHLOROETHANE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2977	1,1-DICHLOROETHYLENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2378	1,2,4-TRICHLOROBENZENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2980	1,2-DICHLOROETHANE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2983	1,2-DICHLOROPROPANE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2990	BENZENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2982	CARBON TETRACHLORIDE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2989	CHLOROBENZENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2380	CIS-1,2-DICHLOROETHYLENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2964	DICHLOROMETHANE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2992	ETHYLBENZENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2968	O-DICHLOROBENZENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2969	P-DICHLOROBENZENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2996	STYRENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2987	TETRACHLOROETHYLENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2991	TOLUENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2979	TRANS-1,2-DICHLOROETHYLENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2984	TRICHLOROETHYLENE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2976	VINYL CHLORIDE	ND		524.2
EP001-TRT-TAP	Q2339388001	09-13-2023	2955	XYLENES, TOTAL	ND		524.2