

# 2021 Drinking Water Quality Report

Consumer Confidence Report

For The

**CITY OF CHANDLER**

**PWS: 1070006**

## *Know the Facts about Your Drinking Water*

It is the goal and responsibility of The City of Chandler to provide you a safe and reliable supply of potable drinking water. This report is a summary of the quality of the drinking water you received in the year 2021. Some of the information in this report may seem complex. We have attempted to provide it in an understandable format, but if you have any questions please call (903) 849-6853. The analysis in this report was made using data from the most recent U. S. Environmental Protection agency (EPA) required tests. We hope this information helps you become more knowledgeable about what's in your drinking water.

## *En Espanol*

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, por favor llame al tel. (903) 849-6853 para hablar con una persona hispano parlante.

## *Where do we get our drinking water?*

The City of Chandler uses **ground water** (well water) that is pumped from the Carrizo/Wilcox formation. The Texas Commission on Environmental Quality has completed an assessment of our source water and results indicate that some of our water sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system please contact Jon Hall, Public Works Director 903-849-6853. For more information about our water sources please refer to the following URL: <http://www.tceq.texas.gov/gis/swaview> . Some of this information is available on Texas Drinking Water Watch at <http://dww2.tceq.texas.gov/DWW/> .

## *Sources of Drinking Water*

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 can 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, 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.

## *ALL Drinking Water May Contain Contaminants*

When drinking water meets federal standards there may not be any health-based benefits to purchasing bottled water or point of use devices. 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. In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

## *SPECIAL NOTICE to At-Risk Populations*

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immunocompromised individuals such as those undergoing chemotherapy for cancer; those 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 for infections. These people should seek advice from their health care providers about drinking water. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

## *Secondary Constituents*

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not EPA. These constituents are not causes for health concerns. Therefore, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water. If you would like additional information about secondary constituents or their levels please call 903-849-6853.

**Public Participation Opportunities**

**If you have questions about your drinking water the City of Chandler will have a public hearing August 9, 2022 at 6 pm** in the City Hall Council Chambers 811 HWY 31 E. (903-849-6853) Additional information can be obtained from: Jon Hall, Public Works Director Phone (903) 849-6853 or e-mail [jhall@chandlertx.com](mailto:jhall@chandlertx.com)

**Inorganic Contaminants**

Year	Constituent	Highest Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Unit of Measure	Violation	Source of Constituent
2020	Barium	0.041	0.041 – 0.041	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2021	Nitrate (as Nitrogen)	0.0612	0.02 – 0.0612	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2020	Fluoride	0.20	0.081 - 0.20	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2020	Chromium	2.5	0.0 – 2.5	100	100	ppb	N	Discharge from steel and pulp mills; erosion of natural deposits.

**Disinfection By-Products**

Year	Constituent	Highest Level Detected	Range of Detected Levels	MCL	MCLG	Unit of Measure	Violation	Source of Constituent
2021	Total Trihalomethanes	51	50.9 – 50.9	80	No goal for total	ppb	N	By-product of drinking water chlorination.
2021	Total Haloacetic Acid	5	4.8 – 4.8	60	No goal for total	ppb	N	By-product of drinking water chlorination.

**Radioactive Contaminants**

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2021	5.3	0 - 5.3	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.

Combined Radium 226/228	2021	1.5	1.5 - 1.5	0	5	pCi/L	N	Erosion of natural deposits.
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**Lead and Copper**

Year	Constituent	The 90 <sup>th</sup> Percentile	Number of Sites Exceeding Action Level	Violation	MCLG	Action Level	Unit of Measure	Source of Constituent
2020	Copper	0.941	0	N	1.3	1.3	ppm	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
2020	Lead	>0.01	0	N	0	0.015	ppm	Corrosion of household plumbing systems; Erosion of natural deposits.

All water systems are required by EPA to report the language below.

**"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. This water system is responsible for providing high quality drinking water but 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>."**

**Water Loss-** The water loss for 2021 is approximately 5.75%.

## Disinfectant Residuals

Year	Constituent	Average	Highest	Lowest	MRDL	MCLG	Units	Violation	Source
2021	Chlorine	2.60	3.96.	0.50	4	4	mg/L	N	Disinfectant used to control microbes

## Volatile Organic Contaminants

Year	Constituent	Highest	Range	MCLG	MCL	Units	Violation	Source
2021	Ethylbenzene	<0.5	<0.5 – <0.5	700	700	ppb	N	Discharge from petroleum refineries
2021	Xylenes	<0.5	<0.5-<0.5	10000	10000	ppb	N	Discharge from petroleum and chemical factories

## Violations

<b>E. coli</b>			
Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITOR GWR TRIGGERED/ADDITIONAL, MAJOR	9/18/2020	6-23-2021	We failed to collect follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected.
MONITOR GWR TRIGGERED/ADDITIONAL, MAJOR	10/26/2020	6-23-2021	We failed to collect follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected.

<b>Chlorine</b>			
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 (DLOOR).	10/01/2021	12/31/2021	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.

## Definitions

**Maximum Contaminant Level (MCL)** -The highest contaminant level permissible 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 health risk. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - The level of a drinking water disinfectant below which there is no known or expected risk to health.

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

**Average (Avg)** –Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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

**Level 2 Assessment** – 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 system on multiple occasions.

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

**Action Level Goal (ALG)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

## Abbreviations

**NTU** - Nephelometric Turbidity Units      **ppm** - parts per million, or milligrams per liter (mg/l)      **ppb** - parts per billion, or micrograms per liter      **ppt** - parts per trillion, or nanograms per liter

**ppq** - parts per quadrillion, or pictograms per liter      **MFL** – million fibers per liter (a measure of asbestos)

**pCi/L**- picocuries per liter (a measure of radioactivity)      **TT or Treatment Technique** – a required process intended to reduce the level of a contaminant in drinking water

**mrem**- millirems per year (a measure of radiation absorbed by the body)      **na**- not applicable