

ANNUAL DRINKING WATER QUALITY REPORT

TX1680001 CITY OF COLORADO CITY

Annual Water Quality Report for the period of January 1 to December 31, 2016.

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

CITY OF COLORADO CITY is a Ground Water System.

For more information regarding this report contact:

Name: Michelle Guelker
Phone: (325) 728-5331

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (325) 728-5331.

Sources of 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 Assessments

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact Michelle Guelker.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://www.tceq.texas.gov/gis/swaview>.

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWW>.

Source Water Name	Well Name	Type of Water	Report Status	Location	Aquifer Name
New East #1	EWF#1	Groundwater	Active	6 miles east of City	Dockum
New East #2	EWF#2	Groundwater	Active	6 miles east of City	Dockum
New East #3	EWF#3	Groundwater	Active	6 miles east of City	Dockum
New East #4	EWF#4	Groundwater	Active	6 miles east of City	Dockum
New East #5	EWF#5	Groundwater	Active	6 miles east of City	Dockum
New East #6	EWF#6	Groundwater	Active	6 miles east of City	Dockum
New East #7	EWF#7	Groundwater	Active	6 miles east of City	Dockum
EWF#8	EWF#8	Groundwater	Active	6 miles east of City	Dockum
EWF#9	EWF#9	Groundwater	Active	6 miles east of City	Dockum
Perkins#1	Perkins#1	Groundwater	Active	6 miles east of City	Dockum
Perkins#4	Perkins#4	Groundwater	Active	6 miles east of City	Dockum
Perkins#5	Perkins#5	Groundwater	Active	6 miles east of City	Dockum
Perkins#6	Perkins#6	Groundwater	Active	6 miles east of City	Dockum
Wallace #1	Wallace #1	Groundwater	Active	7 miles east of City	Dockum

2016 Disinfectant Residual Table

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Likely Source of Contamination
Chlorine Gas	2016	1.4	1.0	1.9	4	4	ppm	N	Water additive used to control Microbes.

2015 Water Loss Audit Information

Water Loss Audit is only required by Texas Water Development Board every 5 years. The next audit will be made in 2021.

Time Period Covered by Audit	Estimated Gallons of Water Lost	Comments and/or Explanations
January to December 2015	1,832,000	Most of the water lost during 2015 was the result of flushing to maintain water quality or leaks in the distribution system.

2016 Water User Survey Information

Water Use Survey is required yearly by the Texas Water Development Board.

Time Period: Jan. to Dec. 2016	Produced Water: 306,382,000
Usage	Volume Used
Residential	100,038,000
Commercial	32,315,000
Institutional	156,716,000
Other Systems	124,000
Unmetered/ Not Billed	5,000,000
In System at any Given Time	7,000,000
Loss for 2016	Estimated 5,000,000

Lead and Copper

Definitions:

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.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.298	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2016	0	15	7.73	3	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

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

- **Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- **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.
- **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 system.
- **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.
- **Level 2 Assessment:** A Level 2 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 system on multiple occasions.
- **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)
- **na:** not applicable.
- **NTU:** nephelometric turbidity units (a measure of turbidity)
- **pCi/L:** picocuries per liter (a measure of radioactivity)
- **ppb:** Micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water
- **ppm:** Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water
- **Treatment Technique or TT:** A required process intended to reduce the level of contaminant in drinking water.
- **ppt:** Parts per trillion, or nanograms per liter (mg/L)
- **ppq:** Parts per quadrillion, or picograms per liter (pg/L)

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2016	2	1.9-1.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	6	5.83-5.83	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	05/08/2014	1.8	1.1 – 1.8	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	05/08/2014	0.03	0.016 – 0.03	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	05/08/2014	8.1	7.4 – 8.1	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	05/08/2014	1.93	1.1 - 1.93	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]	2016	0.214	0.214 - 0.214	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	05/08/2014	8.9	6.4 – 8.9	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/ photon emitters	2016	8.8	8.8 – 8.8	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	2016	1.45	1.45 – 1.45	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2016	24.4	15 – 24.4	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	2016	14	14 - 14	0	30	ug/l	N	Erosion of natural deposits.

Violations Table

Lead and Copper Rule			
The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Follow-up or Routine Tap M/R (LCR)	01/01/2016	11/15/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure the quality of our drinking water during the period indicated.
Water Quality Parameter M/R (LCR)	01/01/2016	06/30/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure the quality of our drinking water during the period indicated.

Public Notification Rule			
The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).			
Violation Type	Violation Begin	Violation End	Violation Explanation
Follow-up or Routine Tap M/R (LCR)	12/31/2016	03/16/2017	The City did not understand the violations received and therefore did not send out the notices until clarification from TCEQ was received.

PUBLIC PARTICIPATION OPPORTUNITIES

City Council Meeting

Date: Second Tuesday of each month

Time: 6 P.M.

Location: Bob Reily Early Learning Center, 1111 E. 9th, Colorado City, TX 79512

Phone Number: 325-728-3464