COLORADO CITY MD 2017 Drinking Water Quality Report
For Calendar Year 2016

Public Water System ID: CO0151200

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact DAVID VALDEZ at 719-676-3396 with any questions or for public participation opportunities that may affect water quality.

General Information

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting http://water.epa.gov/drink/contaminants.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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. Contaminants that may be present in source water include:

- **Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides:** may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water

tested. 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit http://wqcdcompliance.com/ccr. The report is located under "Source Water Assessment Reports", and then "Assessment Report by County". Select PUEBLO County and find 151200; COLORADO CITY MD or by contacting DAVID VALDEZ at 719-676-3396. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Our Water Sources

Source	Source Type	Water Type	Potential Source(s) of Contamination
COLD SPRING	Well	Groundwater Under the Direct Influence of Surface Water	Septic systems and runoff from agricultural and forested areas and roads.
GREENHORN CREEK LAKE BECKWITH	Intake	Surface Water	Septic systems and runoff from commercial, industrial, transportation, residential, agriculture, forested areas and roads.

Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **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 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 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.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in $10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.

Detected Contaminants

COLORADO CITY MD routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2016 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report.

Disinfectants Sampled in the Distribution System **TT Requirement**: No more than 1 sample is below 0.2 ppm **Typical Sources:** Water additive used to control microbes						
Disinfectant Name	**Time Period**	**Results**	**Number of Samples Below 0.2 ppm TT Level**	**Sample Size**	**TT Violation**	**MRDL**
Chlorine	2016	100% met TT Requirement	0	4 per month	No	4.0 ppm

Lead and Copper Sampled in the Distribution System								
Contaminant Name	**Time Period**	**90th Percentile**	**Sample Size**	**Unit of Measure**	**90th Percentile AL**	**Sample Sites Above AL**	**90th Percentile AL Exceedance**	**Typical Sources**
Copper	07/09/2014 to 09/24/2014	0.36	10	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	07/09/2014 to 09/24/2014	4	10	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System										
Disinfection Byproduct Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**Highest Compliance Value**	**MCL Violation**	**Typical Sources**
Total Haloacetic Acids (HAA5)	2016	38.35	29.4 to 48.8	4	ppb	60	N/A	38	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2016	52.18	34.6 to 73.1	4	ppb	80	N/A	62	No	Byproduct of drinking water disinfection
Chlorite	2016	0.39	0 to 0.65	18	ppb	1.0	0.8	0.4	No	Byproduct of drinking water disinfection

Disinfectants Sampled at the Entry Point to the Distribution System						
Disinfectant Name	**Year**	**Non-Compliant Samples**	**Sample Size**	**TT/MRDL Requirement**	**TT/MRDL Violation**	**Typical Sources**
Chlorine	2016	0	3411	TT = No more than 4 hours below 0.8 MG/L	No	Water additive used to control microbes
Chlorine Dioxide	2016	1 sample on December 2, 2016 870 ppb	238	MRDL = 800 ppb	Yes	Water additive used to control microbes

Summary of Turbidity Sampled After Filtration					
Contaminant Name	**Sample Date**	**Level**	**TT Requirement**	**TT Violation**	**Typical Sources**
Turbidity	2016	Highest single measurement: 0.09 NTU in November 2016	Maximum 0.5 NTU for any single measurement	No	Soil Runoff
Turbidity	2016	Lowest monthly percentage of samples meeting TT requirement for our technology: 100 %	In any month, at least 95% of samples must be less than 0.1 NTU	No	Soil Runoff

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Gross Alpha	2014	2.86	2.5 to 3.22	2	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2014	0.35	0.3 to 0.4	2	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2014	3.05	2.8 to 3.3	2	ppb	30	0	No	Erosion of natural deposits

Inorganic Contaminants Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Barium	2016	0.07	0.06 to 0.09	2	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2016	0.22	0.16 to 0.27	2	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2016	0.33	0.01 to 0.65	2	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2016	1.8	1.4 to 2.2	2	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

Secondary Contaminants**						
**Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.						
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**Secondary Standard**
Sodium	2016	18.85	10.7 to 27	2	ppm	N/A

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Our water system recently violated drinking water requirements. Although this situation is not an emergency, as our customers you have a right to know what happened, what you should do, and what we are doing to correct this situation. There is nothing you need to do at this time. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

A routine drinking water inspection conducted on September 28, 2016 by the state drinking water program identified violations and significant deficiencies, some of which may pose a risk to public health.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Violations Identified During Colorado Department of Public Health and Environment Inspection on September 28, 2016			
Violation Description	**Date Correction Required**	**Corrective Action**	**Corrective Action Approved by CDPHE**
Supplier lacked or was not properly performing membrane integrity tests for months of September – October 2016. We previously incorrectly reported this violation as occurring in April & June 2016.	2/22/2017	A STANDARD OPERATING PROCEDURE FOR MEMBRANE INTEGRITY TEST HAS BEEN WRITTEN AND IS BEING PERFORMED. ALL TESTS ARE LOGGED INTO THE COMPUTER AND HAND RECORDED.	February 2017
Supplier was not properly monitoring and or recording turbidity values at the water treatment plant for the Cold Spring Well for months of September – November 2016. In addition, the turbidity meter was not functioning while the plant produced finished water.	2/22/2017	A NEW TURBIDIMETER HAS BEEN PURCHASED AND INSTALLED. MONITORING IS NOW BEING DONE CORRECTLY. MONTHLY OPERATING REPORTS ARE REPORTED TO THE STATE EVERY MONTH.	February 2017

Supplier has not developed or maintained a storage tank inspection plan.	2/22/2017	THE STATE OF COLORADO HAS A TEMPLATE. COLORADO CITY HAS ADDOPTED THIS TEMPLATE AND FOLLOWS THE GUIDELINES.	Pending State Approval
Supplier has not performed the required storage tank inspections. We previously incorrectly reported this violation as occurring in April & June 2016.	2/22/2017	STARTING IN THE FOURTH QUARTER OF 2016 AND THROUGH PRESENT, WE ARE PERFORMING STORAGE TANK INSPECTIONS.	12/16/2016
Supplier did not maintain calibration logs, was not calibrating, verifying or operating turbidity monitoring analytical equipment in accordance with manufacturer requirements.	2/22/2017	THE CALIBRATIONS ARE KEPT IN TURBIDITY UNITS AND NOW HAND LOGGED.	February 2017
Supplier did not maintain verification logs, was not verifying or operating disinfectant monitoring analytical equipment in accordance with manufacturer requirements. POTENTIAL ADVERSE HEALTH EFFECTS: Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. These symptoms are not only caused only by organisms in drinking water, but also by other factors.	2/22/2017	A STANDARD OPERATING PROCEDURE FOR ANALYZER CALIBRATION HAS BEEN WRITTEN. BIWEEKLY TESTS TO VERIFY DISINFECTION ARE TAKEN IN THE PLANT AND IN THE DISTRIBUTION SYSTEM.	February 2017
Supplier did not maintain records according to the minimum requirements specified in Regulation 11. Supplier was unable to locate the monitoring plan and turbidity records.	2/22/2017	A MONITORING PLAN WHICH INCLUDES A RECORDS RETENTION POLICY HAS BEEN COMPLETED AND SUBMITTED TO THE STATE. ALL TURIBIDITIES AND CHLORINE RESIDUALS ARE RECORDED EVERY FOUR HOURS AT BOTH WATER TREATMENT PLANTS. THIS INFORMATION IS REPORTED TO THE STATE EVERY MONTH.	February 2017

Supplier lacked a monitoring plan, the plan did not include the required content, the plan had not been updated for facility changes or the plan had not been submitted.	2/22/2017	THE WATER MONITORING PLAN HAS BEEN SUMITTED TO THE STATE.	Pending State Approval
Supplier has failed to develop or implement a written backflow prevention and cross-connection control program.	2/22/2017	COLORADO CITY HAS AN ORDINANCE FOR CROSS CONNECTION. ALL POTENTIAL SERVICES HAVE BEEN MAILED A COPY. A COMPLETE BACKFLOW PREVENTION AND CROSS CONNECTION CONTROL WILL BE SUBMITTED TO THE STATE.	Pending State Approval

Significant Deficiencies Identified During Colorado Department of Public Health and Environment Inspection on September 28, 2016

Deficiency Description	Date Correction Required	Corrective Action	Corrective Action Approved by CDPHE
CROSS CONNECTION. Uncontrolled cross connection that may allow contamination to enter drinking water. A cross connection existed between the block and bleed assembly of the membrane skid and the waste channel.	2/28/2017	AN AIR GAP HAS BEEN CREATED BETWEEN THE BLOCK AND BLEED HOSE AND THE WASTE PIPE. ALL BLOCK AND BLEED VALVES ARE INSPECTED TO VERIFY OPERATION.	2/27/2017
SECONDARY CONTAINMENT. Chemical storage existed without secondary containment or appropriate measures to mitigate risks to operators or finished water.	2/28/2017	ALL LIQUID TREATMENT CHEMICALS ARE STORED ON SEPARATED CONTAINMENT PALLETS.	2/27/2017
CHEMICAL SAFETY. Gas chlorine or other treatment chemical facility safety features appeared inadequate. Chemicals had been stored next to incompatible chemicals.	2/28/2017	ALL LIQUID TREATMENT CHEMICALS ARE STORED ON SEPARATED CONTAINMENT PALLETS. A STANDARD OPERATING PROCEDURE FOR HANDLING CHEMICALS HAS BEEN WRITTEN AND IS IN USE.	2/27/2017
MEMBRANE FILTRATION INTEGRITY TESTING. Supplier lacked or was not properly performing membrane integrity tests at the surface water treatment plant. Additionally there was a 30 gallon storage tank installed prior to the turbidimeter that impeded monitoring of turbidity.	2/28/2017	TESTS ARE PERFORMED ON A REGULAR SCHEDULE, NO LESS THAN WEEKLY. THE TANK HAS BEEN REMOVED AND A FOUR INCH BY FOUR FOOT BUBBLER TUBE HAS BEEN INSTALLED.	2/27/2017

PROPER OPERATION. Ground water under the direct influence (GWUDI) of surface water treatment operational practices. There was no written protocol on site for the process to clean filters used in the treatment plant for the Cold Spring Well.	2/28/2017	STANDARD OPERATING PROCEDURES FOR CLEANING THE FILTERS HAVE BEEN WRITTEN AND ARE PERFORMED WEEKLY.	2/27/2017
STORAGE CONDITION. The condition of the storage structure may allow potential sources of contamination to enter the tank. Defects were detected at four storage tanks within the system. Defects included unscreened vents, missing gaskets on hatches and unprotected overflow drains.	2/28/2017	ALL DEFICIENCIES HAVE BEEN ADDRESSED: FLAPPER REPAIRED –DRAIN SCREENED—HATCHES GASKETED.	2/27/2017

Other Violations

Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL	Explanation, Corrective Action, and Resolution Date
DISINFECTION BYPRODUCTS (TTHM & HAA5)	MONITORING NON-HEALTH-BASED	10/01/2016 - 12/31/2016	N/A	N/A	N/A	THE SAMPLE WAS PULLED IN THE WRONG TIME FRAME (MONTH). SAMPLING SCHEDULE IS NOW ARRANGED TO BE TAKEN IN CORRECT TIME FRAME (MONTH) AND QUARTER. RESOLVED ON 2/1/2017 WHEN THE NEXT SAMPLE WAS COLLECTED CORRECTLY.
CHLORITE	MONITORING NON-HEALTH-BASED	05/01/2016 - 06/30/2016	N/A	N/A	N/A	SAMPLE WAS NOT REPORTED TO THE STATE. SAMPLING WILL NOW BE REPORTED BY THE LAB TO THE STATE RESOLVED ON 7/20/16 WHEN THE NEXT SAMPLE WAS COLLECTED CORRECTLY.

CHLORINE DIOXIDE	MRDL, ACUTE HEALTH-BASED	12/01/2016 - 12/31/2016	Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.	870 ppb	800 ppb	A STANDARD OPERATING PROCEDURE HAS BEEN ADOPTED AND IS STRICTLY ADHERED TO. RESOLVED ON 12/3/16 WHEN THE NEXT SAMPLING DAY SHOWED NO EXCEEDANCE.
CHLORINE DIOXIDE	NOTIFICATION NON-HEALTH-BASED	12/01/2016 - 12/31/2016	N/A	N/A	N/A	THE REPORTING OF THE EXCEDENCE WAS MISSED. ALL SAMPLING IS NOW REPORTED TO THE OPERATOR AND IMMEDIATELY LOGGED. RESOLVED ON 1/18/17 WHEN THE OPERATOR NOTIFIED THE STATE.
CHLORINE DIOXIDE	MONITORING NON-HEALTH-BASED	12/01/2016 - 12/31/2016	N/A	N/A	N/A	WE MISSED THE REQUIRED RESAMPLES THAT SHOULD HAVE BEEN TAKEN AFTER THE EXCEEDANCE ON 12/3/16 IN THE DISTRIBUTION SYSTEM. INFORMING THE OPERATOR DAILY WILL STOP ANY OCCURANCE OF THIS NATURE FROM HAPPENING IN THE FUTURE. RESOLVED ON 1/31/17 WHEN WE COMPELTED THE NEXT FULL MONTH OF MONITORING WITH NO VIOLATIONS.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.