

Woodmoor Water and Sanitation District 2008 Annual Drinking Water Quality Report Calendar Year 2007 PWSID CO0121950

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. This report will not be mailed to individual residents but a copy is available upon request or at the District's main office located at 1845 Woodmoor Drive.

General Information About Drinking Water

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. 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 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**, such as viruses and bacteria that 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides** that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- **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 stormwater runoff, and septic systems.
- **Radioactive contaminants**, that 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, 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.

Water Sources for Woodmoor Water and Sanitation District

Wells 2, 3, 6, & 7 are located in the Dawson Aquifer

Wells 9 & 17 are located in the Denver Aquifer

Wells 8, 10, 11, 12, 15, 16, & 18 are located in the Arapahoe Aquifer

Lake Woodmoor and/or Monument Creek are surface water sources

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. You may obtain a copy of the report by visiting www.cdphe.state.co.us/wq/sw/swaphom.html or by contacting Randy Gillette at (719) 488-2525.

Potential sources of contamination in our source water area come from: [Table 2] EPA Hazardous Waste Generator (moderately low), EPA Chemical Inventory/Storage Sites (moderate), EPA Toxic Release Inventory Sites (Moderate), Permitted Wastewater Discharge Sites (moderately low), Aboveground, Underground and Leaking Storage Tank Sites (moderately low – moderate), Existing/Abandoned Mine Sites (Moderate), Other Facilities (moderately low – moderate) OR [Table 3] Commercial/Industrial/Transportation, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Fallow, Pasture/Hay, Deciduous Forest, Evergreen Forest, Septic Systems, Road Miles, OR both of the above.

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.

Please contact Randy Gillette at (719)488-2525 to learn more about what you can do to help protect your drinking water sources, any questions about the annual 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.

Water Quality Data

Woodmoor Water and Sanitation District routinely monitors for contaminants in your drinking water according to Federal and State laws. 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. Some of our data, though representative, may be more than one year old. To help you understand the terms and abbreviations used in this report, we have provided the following definitions:

- **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) or Nanograms per liter (nanograms/L)** - 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) or Picograms per liter (picograms/L)** - 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)** - picocuries per liter is a measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Maximum Contaminant Level Goal (MCLG)** - The “Goal” is 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 Contaminant Level (MCL)**- The “Maximum Allowed” is 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 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.
- **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.
- **Running Annual Average (RAA):** An average of monitoring results for the previous 12 calendar months.
- **Gross Alpha, Including RA, Excluding RN & U:** This is the gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222 and uranium.
- **Microscopic Particulate Analysis (MPA):** An analysis of surface water organisms and indicators in water. This analysis can be used to determine performance of a surface water treatment plant or to determine the existence of surface water influence on a ground water well.

Note: Only detected contaminants appear in this report.

These tables show the results of our monitoring for the period of January 1 to December 31, 2007 unless otherwise noted.

Microbiological Contaminant	MCL	MCLG	Unit	Result	Sample Date	Likely Source of Contamination
Total Coliform Bacteria for Systems that collect <40 samples per month	No more than 1 positive monthly sample	0	Absent or Present	Absent	Monthly	Naturally present in the environment

Lead and Copper	AL	Units	90 th Percentile	Sample Date	Likely Source of Contamination
Copper	1.3	ppm	0.28	2005-2007	Corrosion of household plumbing systems; erosion of natural deposits
Lead	15	ppb	5.5	2005-2007	Corrosion of household plumbing systems, erosion of natural deposits

Disinfection By-Products	MCL	MCLG	Units	Average	Range	Highest RAA	Sample Date	Likely Source of Contamination
Total Trihalomethanes (TTHM)	80.00	N/A	ppb	70.64	50.34 – 81.66	71	2007	By-product of drinking water disinfection
Total Haloacetic Acids (HAA5)	60.00	N/A	ppb	36.97778	23.5 – 45.8	37	2007	By-product of drinking water disinfection

Radionuclides	MCL	MCLG	Units	Range	Highest Value	RAA	Sample Date	Typical Source
Gross Alpha, including RA, excluding RN & U	15	0	pCi/L	0.6 - 2.5	2.5	N/A	10/15/2007	Erosion of natural deposits
Radium, combined (226+228)	5	0	pCi/L	0.6 – 10.7	10.7		5/9/2007	Erosion of natural deposits
Uranium Combined	30	0	ppb	0.8	0.8	N/A	3/22/2007	Erosion of natural deposits

Organics and Inorganics	MCL	MCLG	Units	Highest Value	Range	Sample Date	Likely Source of Contamination
Arsenic	50	0	ppb	3	3	3/8/2007	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2	2	ppm	0.12	0.083 -0.12	3/8/2007	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	100	100	ppb	4.5	4.5	3/8/2007	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	4.0	4.0	ppm	1.4	1.2 – 1.4	5/9/2007	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as N)	10	10	ppm	0.37	0.038 – 0.37	3/8/2007	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate+Nitrite (as N)	10	10	ppm	0.11	0.085 – 0.11	10/15/2007	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (as N)	1	1	ppm	0.047	0.036 – 0.047	7/25/2007	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	50	50	ppb	4.2	4.2	3/8/2007	Discharge from petroleum and metal refineries; Erosion of natural products; Discharge from mines

Turbidity	Sample Date	Level Found	TT Requirement	Typical Source
	Date: 1/31/07	Highest Single Measurement: 0.52	Maximum 1.00 NTU for any single measurement	
Month: January 2007	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	In any month, at least 95% of samples must be less than 0.30 NTU		

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. EPA recommends these standards but does not require water systems to comply.

Secondary Contaminants/Other Monitoring	Sample Date	MCLG	Units	Highest Value	Range	Secondary Standard
Sodium	5/9/2007	N/A	ppm	31	2.9 – 31	10000
Solids, Total Dissolved Solids (TDS)	5/9/2007	N/A	ppm	274	184 - 274	500

Health Effects Information About the Above Tables

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

Some people who drink water containing radium-226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

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.

Violations

The following violations were received by our water system or were ongoing in the calendar year 2007.

Type/Description	Category	Analyte	Entry point	Compliance Period
Monitoring, Routine Minor	Failure to Monitor	Inorganics	002T,006T,007T, 011T, 015, 017	1/01/2005 – 12/31/2007
Compliance Advisory	MCL Violation	Radium-226+228	002T	1/01/2007 – 12/31/2007

Woodmoor Water and Sanitation District is required to include an explanation of the violation(s) in the above table and the steps taken to resolve the violation(s): Inorganic sampling was not collected in 2007. Samples were collected in April 2008 and the system was returned to compliance. Combined Radium-226+228 improper sampling technique at well 002T; samples collected in the following four consecutive quarters in 2008 confirmed levels below the MCL and the system was returned to compliance. Public notification was sent.