

City of Monahans

2013 Annual Drinking Water Quality Report

(Consumer Confidence Report)

(432) 943-4343

OUR DRINKING WATER IS REGULATED

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water. 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.

SPECIAL NOTICE

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; 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 from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at (800) 426-4791.

En Espanol

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al tel. (432) 943-4343.

Source 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.

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 results 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, 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.

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.

Where do we get our drinking water?

The source of drinking water used by CITY OF MONAHANS is Ground Water from Cenozoic Pecos Alluvium Aquifer. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus our source water protection strategies. Some of this source water assessment information will be available on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

ALL drinking water may contain contaminants.

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 (1-800-426-4791).

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:

<http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>

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

Source Water Name	Type of Water	Report Status	Location
4-10	GW	Active	Cenozoic Pecos Alluvium
4-11	GW	Active	Cenozoic Pecos Alluvium
4-12	GW	Active	Cenozoic Pecos Alluvium
4-13	GW	Active	Cenozoic Pecos Alluvium
4-14	GW	Active	Cenozoic Pecos Alluvium
4-15	GW	Active	Cenozoic Pecos Alluvium
4-9	GW	Active	Cenozoic Pecos Alluvium

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 the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

PUBLIC PARTICIPATION OPPORTUNITIES

Date: June 24, 2014

Time: 3:00 p.m.

Location: City Council Chambers

112 West 2nd Street

Monahans, TX 79756

Phone No: (432) 943-4343

To learn about future public meetings (concerning your drinking water),
or to request to schedule one, please call us.

Required Additional Health Information for Lead

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. The City of Monahans 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>.

Abbreviations

ppm- parts per million, or milligrams per liter (mg/L)

ppb-parts per billion, or micrograms per liter

ppq- parts per quadrillion, or picograms per liter

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

DEFINITIONS

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

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 margin of safety.

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 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 contamination.

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.

Avg:

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

ppm:

milligrams per liter or parts per million-or one ounce in 7,350 gallons water.

ppb:

micrograms per liter or parts per billion-or one ounce in 7,350,000 gallons of water.

mrem\year:

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

na: not applicable.

Definitions:

MFL

million fibers per liter (a measure of asbestos)

NTU

nephelometric turbidity units (a measure of turbidity)

pCi/L

picocuries per liter (a measure of radioactivity)

ppt

parts per trillion, or nanograms per liter (ng/L)

ppq

parts per quadrillion, or picograms per liter (pg/L)

2013 Regulated Contaminants Detected

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)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	7/2/2010	.015	.000372	.000372	0	ppm	none	Erosion of natural deposits. Household plumbing system
Copper	2013	1.3	1.3	0.148	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Regulated Contaminants

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of levels Detected	MCLG	MCL	UNITS	Violation	Likely Source of Contamination
Arsenic While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to	2013	7	7.29-7.29	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.								
Barium	9/26/2011	.0526	0.0526-0.0526	2	2	ppm	N	Discharge of drilling wastes; Discharge from Metal refineries; Erosion of natural deposits.
Chromium	10/3/2011	.0100	1.66-1.66	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2013	2.1	2.06-2.06	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]	2013	1	1.25-1.25	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	09/26/2011	6.3	6.3-6.3	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Nitrate [measured as Nitrogen]	2013	1	1.25-1.25	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2013	6.5	6.5-6.5	0	50	mrem/yr pCi/L*	N	Decay of natural and man-made deposits.

Combined Radium 226/228	2013	2.7	2.7-2.7	0	5	pCi/L*	N	Erosion of natural deposits
Gross alpha excluding radon and uranium	2013	2.7	1-2.7	0	15	pCi/L*	N	Erosion of natural deposits.
Uranium	2013	2.3	2.3-2.3	0	30	ug/l	N	Erosion of natural deposits
Year	Disinfection	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measurement	
2012	Chlorine Gas	1.11	0.60	1.70	4.0	<4.0	ppm	

WATER LOSS

In the water loss audit submitted to the Texas Water Development Board for the time period of January – December 2013, our system lost an estimated 117,984,000 gallons of water. If you have any questions about the water loss audit please call (512) 239-4691.