2015 Drinking Water Quality Report

RRA - MEDICINE MOUND WATER SYSTEM

Red River Authority of Texas

P. O. Box 240

Wichita Falls, Texas 76307-0240

(866) 723-8697

OUR DRINKING WATER MEETS OR EXCEEDS ALL FEDERAL (EPA) DRINKING WATER REQUIREMENTS

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.

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:

Some people may be more vulnerable to contaminates 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 from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

En Español

Este informe incluye información importante sobre el aqua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (866) 723-8697 para hablar con una persona bilingüe en español.

WHERE DO WE GET OUR DRINKING WATER?

The **RRA - Medicine Mound Water System** utilizes surface water from Greenbelt Lake as its primary source supply. Treated surface water is purchased from the Greenbelt Municipal and Industrial Water Authority (GMIWA) who owns and operates Greenbelt Lake. After treating the raw water from Greenbelt Lake through its treatment facilities, GMIWA transports the water to its customer entities located along a pipeline stretching from just north of Clarendon, Texas southeast to Crowell, Texas. The Texas Commission on Environmental Quality (TCEQ) has completed a Source Water Susceptibility Assessment for all drinking water systems that own their source(s). This report 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 system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts for our system contact Henry C. Wied at (866) 723-8697.

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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

Public Participation Opportunities

The Authority's Board of Directors regularly meets on the third Wednesday of January, April, July, and September of each year. Specific times and locations of these and/or any special meetings can be obtained by contacting the Authority at (866) 723-8697.

For more information about the water quality of your water system, public participation programs, water conservation programs, and/or general operations policies, call (866) 723-8697 or e-mail the Authority at: info@rra.dst.tx.us. For service requests or reporting leaks after normal business hours, contact your District Manager, Mr. Tim Altman at (940) 636-8063.

System Information

The Red River Authority of Texas owns and operates 29 registered public water supply systems through its Utility Division. The Utility Division maintains over 2,200 miles of transmission lines, two surface water treatment plants, 42 pumping facilities, and serves approximately 10,000 customers residing in a 15 county area of the Red River Basin. The Utility Division is subdivided into geographical districts for proper management, maintenance, and financial accounting of individual systems.

The **RRA-Medicine Mound Water System** is one of the water systems operated by the Utility Division's District 12. In 2015, the system served 45 active connections with an average water use of 371 gallons per day per connection. In the water loss audit submitted to the Texas Water Development Board for the time period of January-December 2015, the system lost an estimated 1.7 MG of water. The primary use of the water was seasonal and rural domestic. No capital improvement items were scheduled for 2015.

The Authority maintains a Water Conservation and Drought Contingency Plan for the Utility Division. Information on the plan is available on the Authority's web page at www.rra.texas.gov or can be obtained by calling (866) 723-8697.

Definitions:

Maximum Contaminant Level (MCL) -
The highest level of a contaminant 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 (MRDL) –
The highest level of 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 (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.

Treatment Technique (TT) -
A required process intended to reduce the level of a contaminant in drinking water.

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

NTU - Nephelometric Turbidity Units
MFL - million fibers per liter
pCi/L - picocuries per liter (a measure of radioactivity)
ppm - parts per million, or milligrams per liter (mg/l)
ppb - parts per billion, or micrograms per liter (ug/l)
ppt - parts per trillion, or nanograms per liter
MG - million gallons

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 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.

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 form materials and components associated with service lines and home plumbing. This water supply 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.

About the Following Tables

U.S. EPA requires water systems to test up to 97 constituents. The attached table contains all of the federally regulated or monitored constituents which have been found in your drinking water

Organic Contaminants - TESTING WAIVED, NOT REPORTED, OR NONE DETECTED
Fecal Coliform - REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.
Unregulated Initial Distribution System Evaluation for Disinfection Byproducts - WAIVED OR NOT YET SAMPLED

Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.						
Year	**Contaminant**	**Highest Single Measurement**	**Lowest Monthly % of Samples Meeting Limits**	**Turbidity Limits**	**Unit of Measure**	**Source of Contaminant**
2015	Turbidity	0.31	99	0.3	NTU	Soil Runoff

Inorganic Contaminants

Year	Contaminant	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Source of Contaminant
2015	Arsenic	4.8	4.8 - 4.8	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
2015	Barium	0.2	0.2 - 0.2	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2015	Cyanide	68.8	68.8 - 68.8	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
2015	Fluoride	0.692	0.692 – 0.692	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2015	Selenium	1	1 - 1	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
2015	Nitrate	2	1.86 - 1.86	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks

Disinfection By-products

Year	Contaminant	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Source of Contaminant
2015	Haloacetic Acids (HAA5)	16	15.8 - 15.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
2015	Total Trihalomethanes (TTHM)	14	13.9 - 13.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Radioactive Contaminants

Year	Contaminant	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Source of Contaminant
2015	Beta/photon Emitters	6.9	6.9 - 6.9	0	50	pCi/L	N	Decay of natural and man-made deposits.
2015	Combined Radium 226/228	1.5	1.5 - 1.5	0	5	pCi/L	N	Erosion of natural deposits.

Red River Authority of Texas
P. O. Box 240
Wichita Falls, Texas 76307-0240

FIRST CLASS MAIL
U.S. POSTAGE PAID
WICHITA FALLS TX
PERMIT 212

RETURN SERVICE REQUESTED

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2015	Chloramine	2.46	0.5	8.3	4.0	< 4.0	ppm	Disinfectant used to control microbes.

Total Coliform

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Year	Contaminant	Highest No. of Positive Samples	MCLG	Violation	Source of Contaminant
2015	Total Coliform Bacteria	1	0	N	Naturally present in the environment

Lead and Copper

Year	Contaminant	MCLG	Action Level (AL)	90th Percentile	# of Sites Over AL	Unit of Measure	Violation	Source of Contaminant
2015	Copper	1.3	1.3	0.3216	0	ppm	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
2015	Lead	0	15	2.2	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.