

Annual Drinking Water Quality Report

TX1380003

CITY OF Munday

Annual Water Quality Report for the period of January 1 to December 31, 2015

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.

For more information regarding this report contact:

Name Winston Stephens, Public Works Director

Phone (940) 422-4331

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (940) 422-4331

CITY OF Munday purchases treated Surface Water from North Central Texas Municipal Water Authority which treats water from Miller Creek Lake.

PUBLIC PARTICIPTION OPPORTUNITIES

City Council Meetings

Date: Second Tuesday of each month

Time: 6:30 P.M.

Location: City Hall, 121 E. Main St., Munday, Texas 76371

Phone Number: 940-864-2333

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 pickup 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 use.
- 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 detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Winston Stephens, Public Works Director

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: SW FROM NORTH CENTRAL TEXAS CC FROM TX1380009 NORTH Type of Water: SW Report Status: Complete Location: Miller Creek Lake

Coliform Bacteria Sampling

Maximum Contaminant Level Goal	Total Coliform Contaminant Level	Highest Number of Positive Samples	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1	0	0	N	Naturally present in the environment.

Disinfection (Chloramine) Sampling

Disinfectant	Year of Range	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measurement	Violation?	Source of Chemical
Chloramines	2015	2.09	0.5	3.9	4.0	4.0	ppm	N	Disinfectant used to control microbes

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	2015	1.3	1.3	0.17	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2015	0	15	1.68	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2015

Regulated Contaminants Detected

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.

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.

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

picouries 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.

ppt

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

ppq

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

Regulated Contaminants in the Munday Distribution System

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)*	2015	50	22.6 - 55	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2015	128	9.8 - 115	No goal for the total	80	ppb	Y	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
Nitrate [measured as Nitrogen]	2015	0.2	0.2 - 0.2	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Regulated Contaminants Detected in the Source Water we Receive from North Central Texas MWA

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2015	<0.7	<0.7 - <0.7	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2015	0.27	0.27 - 0.27	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2015	0.854	0.854	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]	2015	0.036 - 0.036	0.036 - 0.036	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2015	5.3 - 5.3	5.3 - 5.3	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	2013	16.0	16.0	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	2013	1.0	1.0	0	5	pCi/L	N	Erosion of natural deposits.
-------------------------	------	-----	-----	---	---	-------	---	------------------------------

2015 Water Loss Audit Information

Time Period Covered by Audit	Estimated Gallons of Water Lost During 2015	Comments and/or Explanations
January to December 2015	11,671,000	Most of the water lost during 2015 was the result of flushing to maintain water quality or leaks in the distribution system

Violations Table

Consumer Confidence Rule			
The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
CCR ADEQUACY/AVAILABILITY/CONTENT	07/01/2014	07/02/2015	We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water.

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
LEAD CONSUMER NOTICE (LCR)	12/30/2015	03/17/2016	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. The se were supposed to be provided no later than 30 days after learning the results.

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
PUBLIC NOTICE RULE LINKED TO VIOLATION	12/01/2012	2015	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulation s.
PUBLIC NOTICE RULE LINKED TO VIOLATION	07/01/2014	2015	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulation s.
PUBLIC NOTICE RULE LINKED TO VIOLATION	06/15/2015	08/10/2015	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulation s.

Total Trihalomethanes (TTHM)

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.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	01/01/2015	03/31/2015	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	04/01/2015	06/30/2015	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

Violation Explanations—

- Consumer Confidence Report**—This important document was mailed to our customers; however, meet did not meet all of TCEQ's deadlines. Policy and procedures have been modified which should result in all required documentation reaching TCEQ by established deadlines.
- Lead and Copper Rule**— We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. Policy and procedures have been modified which should result in all notifications reaching our customers in a timely manner.
- Public Notification Rule**--- We failed to provide to our customers, in a timely manner concerning the public notices about problems with the TTHM levels in our distribution system. Policy and procedures have been updated and employees have been properly trained concerning the proper technique to follow in order to assure that the public is properly notified concerning violations of the drinking water regulations.
- Total Trihalomethane (TTHM)**— Due the recent drought the water level in Miller Creek Lake had dropped to a very low level resulting in a dramatic increase in the Total Organic Carbon (TOC) levels in the remaining lake water. Once TOCs come in contact with disinfectants, like chlorine, TTHMs are produced (the higher the levels of TOCs the higher the levels of TTHMs). These elevated TOC levels proved to be very difficult to reduce to a level that would not result in elevated levels of TTHMs. Since the recent rains this problem has diminished and our system is now in compliance with the TCEQ's TTHM level requirements.