

# 2017 Annual Drinking Water

## Quality Report

### Consumer Confidence Report

CITY OF MIDLOTHIAN

Phone Number: 972-775-6663

### **SPECIAL NOTICE**

#### **Required language for ALL community public water supplies:**

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.

### **Public Participation Opportunities**

**Date:** Open – Monday - Friday

**Time:** Call for Appointment

**Location:** Water Treatment Plant

**Phone Number:** 972-775-6663

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

For additional information regarding this report or any questions about your drinking water, please contact:

Tim Walker, Plant Manager at 972-775-6663

### **Our Drinking Water System Maintains a Superior Water System Rating**

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 knowledgeable about what's in your drinking water.

### **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 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 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 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.

### **En Español**

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. **(972) 775-3481** -para hablar con una persona bilingüe en español.

## Where do we get our drinking water?

The source of drinking water used by the City of Midlothian is surface water from Joe Pool, Richland Chambers, and Cedar Creek Reservoirs. 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 the City of Midlothian Water Treatment Plant at 972-775-6663. Some of this source water assessment information is available on Texas Drinking Water Watch at <https://www.tceq.texas.gov/gis/swaview>.

## Water Audit Report

The State of Texas requires retail water suppliers serving more than 3,300 connections to submit an annual Water Loss Audit to the Texas Water Development Board. For the period January to December 2017, Midlothian produced 2,401,248,280 gallons of retail treated water, with an adjusted total water loss volume totaling 66,714,862 gallons, which equates to an approximate loss of only 8.19%. The water loss is down approx. 4% this year. (This is as reported to Texas Water Development Board in the 2017 Water Audit Report.) If you have any questions about the water loss audit, please call Tim Walker, Plant Manager at 972-775-6663.

## ALL drinking water may contain contaminants

When drinking water meets federal standards there may not be any health 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. 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 water treatment plant at 972-775-6663. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

## 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. Secondary constituent levels were not exceeded, however, they may affect the taste of your water.

## 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. 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>.

## Definitions

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

**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.

**Maximum Contaminant Level (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.

## Definitions (continued)

**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 (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 (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.

**NA:** Not applicable.

**NTU:** Nephelometric Turbidity Units. A unit for expressing cloudiness of a sample.

**ppb:** Parts per billion.

**ppm:** Parts per million or milligrams per liter (mg/L) – or one ounce in 7,350 gallons of water.

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

## Contaminants Detected in 2017

Source Water Assessment										
System Susceptibility Summary										
Asbestos	Cyanide	Metals	Microbial	Minerals	Radiochemical	Synthetic Organic Chemicals	Disinfection Byproduct	Volatile Organic Chemicals	Drinking Water Contaminant Candidate	Other
LOW	MEDIUM	HIGH	MEDIUM	HIGH	HIGH	HIGH	LOW	HIGH	HIGH	LOW

Entry Point Susceptibility Summary											
Entry Point ID	Asbestos	Cyanide	Metals	Microbial	Minerals	Radiochem	Synthetic Organic Chemicals	Disinfection Byproduct	Volatile Organic Chemicals	Drinking Water Contaminant Candidate	Other
001	MEDIUM	MEDIUM	HIGH	MEDIUM	HIGH	HIGH	HIGH	MEDIUM	HIGH	HIGH	MEDIUM

### 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) ppm	90 <sup>th</sup> Percentile	No. of Sites Over AL	Units	Violation	Likely Source of Contamination
Copper *	2016	1.3	1.3	0.18	0	ppm	No	Corrosion of household plumbing systems; erosion of natural deposits.
Lead *	2016	0.015	0.015	0.0010	0	ppm	No	Corrosion of household plumbing systems; erosion of natural deposits.

\* Lead and copper is tested every 3 years.

### Disinfectant Residuals

Disinfectant Used	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Source of Chemical
Chloramine	3.06	2.54	3.26	4.0	<4.0	ppm	No	Disinfectant used to control microbes

Disinfection By-Products	Date Sampled	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Units	Violation	Likely Source of Contamination
Chlorite	2017	1.61	0.197-1.61	1.0	0.8	ppm	Y	Byproduct of drinking water disinfection

Disinfection By-Products	Collection Date	Highest Locational Running Annual Average	Range of Levels Detected	MCL	MCLG	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5s)	2017	36	18.8-52.9	60	0	ppb	No	Byproduct of drinking water disinfection.
Trihalomethanes (THMs)	2017	36	14.1-39.8	80	0	ppb	No	Byproduct of drinking water disinfection.

Regulated Contaminants	Date Sampled	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Units	Violation	Likely Source of Contamination
Arsenic	2017	1	0-1.4	10	0	ppb	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Atrazine	2017	1	0.2-0.5	3	3	ppb	No	Runoff from herbicide used on row crops.
Barium	2017	0.05	0.043-0.05	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	2017	<0.00100	<0.00100	100	100	ppb	No	Discharge from steel and pulp mills; erosion of natural deposits.
Cyanide (as free cyanide)	2017	<0.0200	<0.0200 - <0.00500	200	200	ppb	No	Discharge from steel/metal factories; discharge from plastic and fertilizer factories.
Fluoride	2017	0.324	0.0100 - 0.324	4	4	ppm	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories.

Regulated Contaminants	Date Sampled	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Units	Violation	Likely Source of Contamination
Nitrate (measured as Nitrogen)	2017	0.194	0.168 - 0.194	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Simazine- (Synthetic organic contaminant herbicide)	2017	0.13	0 - 0.13	4	4	ppm	No	Herbicide Runoff
Nitrite (measured as Nitrogen)	2013	0.0515	0.0515- 0.0515	1	1	ppm	No	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Units	Violations	Likely Source of Contamination
Beta/photon emitters	2017	6.5	6.5 – 6.5	0	4	Mrem/yr	No	Decay of Natural & Man Made Deposits

## Total Organic Carbon

The percentage of Total Organic Carbon (TOC) was measured each month and the system met all TOC removal required.

Turbidity	Highest Level Detected	Limit (Treatment Technique)	Lowest monthly percentage of samples meeting the turbidity limits	Violation
Turbidity	0.42 NTU	.3 NTU	100%	No

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration

## Violation Table

### 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) 12/30/2016 02/23/2017 We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

**Lead and copper testing resulted in levels that were well under the Action Level and Maximum Contaminant Level Goals and were in full compliance with the EPA Drinking Water Requirements.**

**The violation referenced above, from 12/30/2016 – 2/23/2017, is a notification violation only. Upon receipt of the lead and copper testing results, the City provided these results to the individual homeowners in which the samples were obtained. However, due to an oversight by the City, the required Certificate of Delivery was not provided to the TCEQ. This oversight has been corrected and the proper documentation has been provided to the TCEQ.**

### Violations

<b>Chlorite</b>			
Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.			
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
MCL, AVERAGE (CHLORITE)	11/01/2017	11/30/2017	Water samples showed that the amount of this contaminant in our drinking water was above its standard for the period indicated. Because of the contaminant and the sample locations, this posed an acute health risk.
MONITORING, ROUTINE (DBP), MAJOR	11/01/2017	11/30/2017	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

The MCL exceedance for Chlorites found in the drinking water system during the sampling period for the month of November 2017 (the high readings were only found in one area) were promptly flushed from the City water system and returned to compliance within three days. The City performs three chlorite tests per day to ensure that Chlorites are in compliance. The sampling period for the month of December 2017 and all subsequent months have resulted in Chlorite levels that are below the MCL.

## Public Notice for Monitoring Violation

### Chemical Monitoring Violation, Routine Major

The **City of Midlothian** water system PWS ID **TX 0700005** has violated the monitoring/reporting requirements set by the Texas Commission on Environmental Quality (TCEQ) in Chapter 30, Section 290, Subchapter F. Public water systems are required to collect and submit chemical samples of water provided to their customers and report the results of those samples to TCEQ on a regular basis.

We failed to monitor and/report the following constituent Chlorite.

This violation occurred in the monitoring period November 2017.

Results of regular monitoring are an indicator of whether your drinking water is safe from chemical contamination. We did not complete all monitoring/reporting for chemical constituents, and therefore TCEQ cannot be sure of safety of your drinking water during that time.

We are taking the following actions to address this issue:

#### **Ensuring that normal and proper operating procedures and testing protocols are being followed.**

Please share this information with all other people who drink this water, especially those who may not have received this notice directly (i.e., people in apartments, nursing homes, schools, and businesses).

If you have any questions regarding this matter, you may contact Tim Walker at 972-775-6663.

Posted / Delivered on: 06/5/2018

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#### **-Note**

This monitoring violation was due to a miscommunication between staff. All chlorite samples are required to be taken on the same day; however, one sample was taken a week after the other five samples, which triggered the monitoring violation. The issue was promptly corrected and the City was back in monitoring compliance by December 2017.

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**The majority of water samples are taken by a State Contracted Sampler and samples are evaluated at Lower Colorado River Authority's Laboratory.**

**For more tips, information, notices, and links on using water wisely, please visit the City of Midlothian's website at <http://www.midlothian.tx.us> or click on <http://www.midlothian.tx.us/index.aspx?nid=382> to go directly to the Water Conservation link. If you have any questions, please contact the Engineering Department at 972-775-7199.**

**For more information about the Water Treatment Plant, click on <http://www.midlothian.tx.us/index.aspx?nid=140> or click on <http://www.midlothian.tx.us/index.aspx?nid=22> to learn more about Water Distribution.**