

# 2003 Midland Water Quality Report

## Drinking Water Quality Report

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

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 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

### **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 to become more knowledgeable about what's in your drinking water.

### **Where Do We Get Our Drinking Water?**

Midland's drinking water comes from wells in Martin and Andrews Counties and from three surface water sources, Lake J.B. Thomas near Snyder, E.V. Spence Reservoir near Robert Lee; and Lake Ivie near Ballinger, managed by the Colorado River Municipal Water District (CRMWD).

A Source Water Susceptibility Assessment for our drinking water sources(s) is currently being conducted by the TCEQ and will be provided to us this year. This report will describe the susceptibility and types of constituents that may come into contact with our drinking water source based on human activities and natural conditions. The information contained in this assessment will allow us to focus our source water protection strategies.

### **En Espanol**

Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o' discusiones sobre este reporte in espanol, favor de llamar al tel. (432) 685-7100 par hablar con una persona bilingue en espanol.

### **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 (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. These 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 and are therefore, not required to be reported in this document. They may, however, greatly affect the appearance and taste of your water.

### **Public Participation Opportunities**

The Midland City Council meets on the 2<sup>nd</sup> and 4<sup>th</sup> Tuesdays of each month at City Hall, 300 N. Loraine Street, at 10:00 a.m. The Council agenda is posted for public notice at least 72 hours prior to the meetings. To find out whether water issues will be considered at a particular City Council meeting, please call the Utilities Department at (432-685-7260).

### **Arsenic**

The maximum contaminant level (MCL) for arsenic will be decreasing from 0.05 mg/l (CCR - 50ppb) to 0.01 mg/l (CCR - 10ppb) effective January 23, 2006. EPA and States are still discussing the level. Some people who drink water-containing arsenic in excess of the MCL over many years could experience skin damage, problems with their circulatory system, and may have an increased risk of getting cancer.

## About The Following Pages

The pages that follow list all of the federally regulated or monitored constituents which have been found in your drinking water. U.S. EPA requires water systems to test up to 97 constituents.

### Definitions

#### **Maximum Contaminant Level (MCL)**

The highest permissible 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 not known or expected health risk. MCLGs allow for a margin of safety.

#### **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 (a measure of asbestos)

**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 (µg/l)

**ppt** – parts per trillion or nanograms per liter

**ppq** – parts per quadrillion, or picograms per liter

### **Inorganics**

Year	Constituent	Highest Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Unit of Measure	Source of Constituent
2002	Arsenic	32.7	7.2000-32.7000	50	0	ppb	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
2002	Barium	0.155	0.0180-0.1550	2	2	ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2002	Fluoride	2.9	0.3000-2.9000	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2002	Nitrate	4.05	0.5500-4.0500	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
1999	Nitrite	0.01	0.0000-0.0100	1	1	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2002	Selenium	35.9	17.7000-35.9000	50	50	ppb	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
2002	Gross alpha adjusted	10.3	1.7000-10.3000	15	0	pCi/l	Erosion of natural deposits.
2002	Gross beta emitters	11.4	8.8000-11.4000	50	0	pCi/l	Decay of natural and man-made deposits.

NA = MCL not applicable – not regulated. Special Monitoring Requirement.

### **Organics**

Not Tested For or Not Detected

### Disinfection Byproducts

Year	Constituent	Average of All Sampling Points	Range of Detected Levels	MCL	MCLG	Unit of Measure	Source of Constituent
2003	Total Haloacetic Acids	15.9375	0.00-24.20	60	0	ppb	By-product of drinking water disinfection.
2003	Total Trihalomethanes	64.1325	38.20-83.00	80	0	ppb	By-product of drinking water chlorination.

### Unregulated Contaminants

Year	Constituent	Average of All Sampling Points	Range of Detected Levels	Unit of Measure	Reason for Monitoring
2003-2002	Bromoform	0	0.0000-1.0000	ppb	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

### 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	Constituent	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Constituent
2003	Turbidity	0.32	100.00	0.3	NTU	Soil Runoff

### Lead & Copper

Year	Constituent	The 90 <sup>th</sup> Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Constituent
2003	Lead	2.6000	0	15	ppb	Corrosion of household plumbing systems; Erosion of natural deposits
2003	Copper	0.2670	1	1.3	ppm	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

### Coliforms

What are coliforms?

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.

Fecal coliform bacteria and, in particular, E. coli, are members of the coliform bacteria group originating in the intestinal tract of warm-blooded animals and are passed into the environment through feces. The presence of fecal coliform bacteria (E. coli) in drinking water may indicate recent contamination of the drinking water with fecal material. The following table indicates whether total coliform or fecal coliform bacteria were found in the monthly drinking water samples submitted for testing by your water supplier last year.

**Fecal Coliform**      Not Detected

### Total Coliform

Year	Constituent	Highest Monthly % of Positive Samples	MCL	Unit of Measure	Source of Constituent
2003	Total Coliform Bacteria	0.68	*	Presence	Naturally present in the environment.

\*Presence of coliform bacteria in 5% or more of the monthly samples.