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POSTAL CUSTOMER
MIDLAND, TX

Definitions and Abbreviations

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 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. MRDLG's 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.

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

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 ($\mu\text{g/l}$)

ppt – parts per trillion or nanograms per liter

ppq – parts per quadrillion, or picograms per liter

na – not applicable

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

2010 Midland Water Quality Report

Drinking Water Quality Report

En Español

Este reporte incluye información importante sobre el agua potable. Si tiene preguntas o discusiones sobre éste reporte en español, favor de llamar al tel. (432) 685-7100 par hablar con una persona bilingue en español.

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 for cancer; 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.

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 following pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Public Participation Opportunities

The Midland City Council meets on the 2nd and 4th 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.

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

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.

Contaminates 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.

Where Do We Get Our Drinking Water?

Midland's drinking water comes from the Ogallala and Edwards-Trinity Plateau aquifers in Martin and Andrews Counties and from surface water sources owned and operated by the Colorado River Municipal Water District (CRMWD); lakes J.B. Thomas, O.H. Ivie, Moss Creek and E.V. Spence.

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. The 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 this assessment will allow us to focus our source water protection strategies. Some of this source water assessment information is 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.

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. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

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>.

About The Following Pages

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

Report Data

Lead & 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. ALG's 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	Unit of Measure	Violation	Source of Contaminant
Copper	06/11/2009	1.3	1.3	0.115	0	ppm	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.32 NTU	N	Soil Runoff
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil Runoff

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
Haloacetic Acids (HAA5)*	2010	18	1.4 - 18.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TThm)*	2010	68	22.4 - 74.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
Arsenic	2010	30.8	30.8 - 30.8	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronics production wastes.
Barium	2010	0.021	0.021 - 0.021	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2010	4.8	0.74 - 4.81	4	4.0	ppm	Y	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2010	1.99	0.46 - 1.99	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	2010	60	59.2 - 59.2	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	Unit of Measure	Violation	Source of Contaminant
Beta/photon emitters	2010	23.8	23.8 - 23.8	0	4	mrem/yr	N	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	2010	11.9	11.9 - 11.9	0	15	pCi/L	N	Erosion of natural deposits.

Secondary and Other Not Regulated Constituents

No associated adverse health effects

Year or Range	Constituent	Average Level	Limit	Unit of Measure	Source of Constituent
2010	Calcium	191	NA	ppm	Abundant naturally occurring element
2010	Chloride	581	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2010	Copper	0.0025	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2005-2008	Hardness as Ca/Mg	451	NA	ppm	Naturally occurring calcium and magnesium
2010	Iron	Less than detection limit	.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities
2009	Lead	.0013	.002	ppm	Corrosion of household plumbing systems; erosion of natural deposits.
2010	Magnesium	188	NA	ppm	Abundant naturally occurring element
2010	Manganese	Less than detection limit	.05	ppm	Abundant naturally occurring element
2010	Nickel	0.0036	NA	ppm	Erosion of natural deposits.
2010	pH	7.5	8.5	units	Measure of corrosivity of water
2010	Sodium	309.5	NA	ppm	Erosion of natural deposits; byproduct of oil field activity
2010	Sulfate	567	250	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity
2010	Total Dissolved Solids	1990	500	ppm	Total dissolved mineral constituents in water
2010	Total Hardness as CaCO ₃	1250	NA	ppm	Naturally occurring calcium.
2010	Zinc	0.0143	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.
2010	Chloroform	0.0294	0.6	ppb	By-product of drinking water disinfection.
2010	Bromoform	37.8	100	ppb	By-product of drinking water disinfection.
2010	Bromodichloromethane	3.59	100	ppb	By-product of drinking water disinfection.
2010	Dibromochloromethane	11.91	100	ppb	By-product of drinking water disinfection.

Fluoride

Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of teeth, and occurs only in developing teeth before they erupt from the gum.

Violation Type	Violation Begin	Violation End	Steps to Correct
MCL, AVERAGE	01/01/2010	03/31/2010	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, AVERAGE	04/01/2010	06/30/2010	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, AVERAGE	07/01/2010	09/30/2010	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, AVERAGE	10/01/2010	12/31/2010	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, SINGLE SAMPLE	01/01/2010	03/31/2010	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.

Steps to Correct Violations

This constituent is only found in groundwater from the Paul Davis well field. The City only uses this water in the summer during peak demands. The City is working to redesignate the entry points to our system to insure that the water from the Paul Davis well field is blended with treated surface water to insure the levels of fluoride are always below regulatory limits.