

City of Mesquite

2008 Annual Drinking Water Quality Report

(Consumer Confidence Report)

Safe Drinking Water

In 1996, the United States Congress amended the Safe Drinking Water Act to require all water suppliers to distribute a Consumer Confidence Report to every water customer in the system. The City of Mesquite strives to provide high quality drinking water that is both safe and reliable and is proud to provide the following report to our customers. The City of Mesquite water system maintains a "superior" water system rating with the Texas Commission on Environmental Quality (TCEQ).

Water Sources

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 before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

Where do we get our drinking water?

Mesquite is a member of the North Texas Municipal Water District (NTMWD), which supplies water to over 35 cities across North Texas. The primary source for Mesquite's water is SURFACE water. Water is delivered from Lake Lavon and is supplemented by water from both Lake Texoma and Lake Chapman. Mesquite's water is treated at the NTMWD facility in Wylie, Texas. A Source Water Susceptibility Assessment for your drinking water sources is currently being updated by the Texas Commission on Environmental Quality and will be provided to us this year. The report will describe 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 the assessment will allow us and/or the system from which we receive water to focus on source water protection strategies. For more information on source water assessments and protection efforts at our system, please contact us.

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 no known or expected risk to health. 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

A required process intended to reduce the level of a contaminant in drinking water.

Action Level

The concentration of a contaminant which, if exceeded, triggers treatment or other requirement a water system must follow.

ABBREVIATIONS

NTU - Nephelometric Turbidity Units
MFL - million fibers per liter (a measure of asbestos)
pCi/l - picocuries per liter (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
ppq - parts per quadrillion
mrem/year - millirems per year (measure of radiation absorbed by the body)
ND - None detectable.

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 those 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 for infections. These people should seek advice about drinking water from their health care providers. The 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 at (1-800-426-4791).

Contact Information

The Mesquite Utilities Division is a part of the City of Mesquite and is governed by the Mesquite City Council. The Council meets the first and third Mondays of the month at 711 N. Galloway Avenue at 3:00 p.m.

Please contact us at the following numbers:

Questions or concerns about water quality - (972) 216-6278

Questions about your water bill - (972) 216-6208

This report was mailed to all Mesquite water customers. Copies of the report are available in the City Secretary's Office and on the City of Mesquite Web site - www.cityofmesquite.com. If you know someone who did not receive a copy of this report or you would like additional copies, please contact us at (972) 216-6278 or at City of Mesquite Water Utilities, P.O. Box 850137, Mesquite, Texas 75185-0137.

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)

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. Therefore, secondaries are not required to be reported in this document, but they may greatly affect the appearance and taste of your water. For more information on taste and odor or color of drinking water, please call (972) 216-6278

"Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (972) 216-6278."

Inorganic Contaminants

Year of Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Possible Source
2008	Barium	0.04	0.039	0.041	2	2	ppm	Erosion of natural deposits
2008	Fluoride	0.46	0.45	0.47	4	4	ppm	Water additive promoting strong teeth
2008	Nitrate	0.44	0.42	.45	10	10	ppm	Runoff from fertilizer
2008	Gross beta emitters	3.5	2.6	4.4	50	0	pCi/L	Decay of natural & manmade deposits

Organic Contaminants

Year of Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Possible Source
2008	Atrazine	0.11	0.10	0.12	3	3	ppb	Runoff from herbicides

Maximum Residual Disinfectant Level

Year of Range	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Possible Source
2008	Chloramines	1.95	0.5	2.2	4.0	<4.0	ppm	Disinfectant residual

Disinfection Byproducts

Year of Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Possible Source
2008	Total Haloacetic Acids	28.4	0	41.5	60	ppb	Byproduct of drinking water disinfection
2008	Total Trihalomethanes	44.6	30.5	56.3	80	ppb	Byproduct of drinking water disinfection

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts

This evaluation is sampling required by EPA to determine the range of total trihalomethane and haloacetic acid in the system for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions.

Year of Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Possible Source
2007	Total Haloacetic Acids	16.1	0	31.8	NA	ppb	Byproduct of drinking water disinfection
2007	Total Trihalomethanes	54.2	29.7	100.4	NA	ppb	Byproduct of drinking water disinfection

Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane and bromodichloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year of Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Possible Source
2008	Chloroform	18.62	13.35	25.92	ppb	Byproduct of drinking water disinfection
2008	Bromoform	N/D	N/D	N/D	ppb	Byproduct of drinking water disinfection
2008	Bromodichloromethane	14.62	12.17	20.16	ppb	Byproduct of drinking water disinfection
2008	Dibromochloromethane	5.95	5.2	8.13	ppb	Byproduct of drinking water disinfection

Lead and Copper

Year of Range	Contaminant	The 90 th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Possible Source
2005	Lead	2	0	15	ppb	Corrosion of customer plumbing
2005	Copper	0.567	0	1.3	ppb	Corrosion of customer plumbing

"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>."

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 of Range	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Possible Source
2008	Turbidity	0.40	98.00	0.3	NTU	Soil runoff

Total Coliform Bacteria

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 of Range	Contaminant	Highest Monthly % of Positive Samples	MCL	Unit of Measure	Possible Source
2008	Total Coliform Bacteria	1	*	Presence	Naturally present in the environment

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

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

Secondary and Other Constituents Not Regulated
(No associated adverse health effects)

Year of Range	Contaminant	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Possible Source
2008	Bicarbonate	110	108	111	NA	ppm	Erosion of carbonate rocks
2008	Calcium	61.1	60.4	61.8	NA	ppm	Abundant naturally occurring element
2008	Chloride	47	47	48	300	ppm	Naturally occurring element; used in water purification; byproduct of oil field activity
2008	Copper	0.042	0.008	0.075	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2008	Hardness as Ca/Mg	174	172	176	NA	ppm	Naturally occurring calcium and magnesium.
2008	Magnesium	5.3	5.3	5.3	NA	ppm	Abundant naturally occurring element.
2008	Manganese	0.0006	0	0.0012	.05	ppm	Abundant naturally occurring element.
2008	Nickel	0.004	0.004	0.004	NA	ppm	Erosion of natural deposits.
2008	pH	7.9	7.8	7.9	>7.0	units	Measure of corrosivity of water.
2008	Sodium	38	35	40	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2008	Sulfate	71	62	80	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2008	Total Alkalinity as Ca CO ₃	110	108	111	NA	ppm	Naturally occurring soluble mineral salts.
2008	Total Dissolved Solids	343	334	351	1000	ppm	Total dissolved mineral constituents in water.
2006	Total hardness as CaCO ₃	215	215	215	NA	ppm	Naturally occurring calcium.
2008	Zinc	0.005	0.005	0.005	5	ppm	Moderately abundant naturally occurring element used in the metal industry.