



2008 ANNUAL DRINKING WATER

QUALITY REPORT

(Consumer Confidence Report)

City of Sachse

972.495.7600



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 to 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 this report. We hope this information helps you become more knowledgeable about what is in your drinking water.

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.

Public Participation

Opportunities: Currently, there are no public meetings concerning our drinking water scheduled. The City Council meets the first and third Mondays of the month. To request an item concerning our drinking water be placed on a future agenda for public participation, please call 972.495.7600.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. 972.495.7600 - para hablar con una persona bilingüe en español.

Where Do We Get Our Drinking Water?

Our drinking water is obtained from LAKE LAVON, a surface water source. A Source Water Susceptibility Assessment for our drinking water source is currently being updated by the TCEQ and will be provided to the Public Works office. The 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 the assessment will allow us and/or the system(s) from which we receive water to focus on source water protection strategies. For information on source water assessments and protection efforts, please contact NTMWD or the City of Sachse.

Special Note for ELDERLY, INFANTS, CANCER, HIV/AIDS PATIENTS or people with other immune issues:

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 from their health care providers about drinking water. The EPA/Center for Disease Control and Prevention (CDC) guidelines for reducing the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1.800.426.4791.

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.

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, and are not cause 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.

Water Taste and Odor

Another issue causing taste and odor in our water results from extended hot weather periods that cause lake algae to reproduce or "bloom", emitting an oily, organic substance. Oily taste and odor in the water are aesthetic and do not present health-related concerns. In an attempt to reduce the organic residue, the NTMWD takes additional steps in the treatment process. Although water may, on occasion, have an unpleasant taste or odor, it is still perfectly safe to drink.

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.

DEFINITIONS

Maximum Contaminant Level (MCL): 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): 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): 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): 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 (TT): Required process intended to reduce the level of a contaminant in drinking water.

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

ABBREVIATIONS

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

NTMWD - North Texas Municipal Water District (Public Information Office 972.442.5405)

TCEQ - Texas Commission on Environmental Quality Safe Drinking Water Hotline 1.800.426.4791

Inorganic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	Barium	0.04	0.039	0.041	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2008	Fluoride	0.46	0.45	0.47	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2008	Nitrate	0.44	0.42	0.45	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2008	Gross beta emitters	3.5	2.6	4.4	50	0	pCi/L	Decay of natural and man-made deposits.

Organic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	Atrazine	0.11	0.1	0.12	3	3	ppb	Runoff from herbicide used on row crops.

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2008	Chloramine Residual	2.62	1.4	3.5	4	4	ppm	Disinfectant used to control microbes.

Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2008 2005	Chloroform	23.79	13.35	31.8	ppb	Byproduct of drinking water disinfection.
2008 2005	Bromoform	0.27	0	2.51	ppb	Byproduct of drinking water disinfection.
2008 2005	Bromodichloromethane	18.44	12.17	25.3	ppb	Byproduct of drinking water disinfection.
2008 2005	Dibromochloromethane	9.05	5.2	15.6	ppb	Byproduct of drinking water disinfection.

Disinfection Byproducts

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2008	Total Haloacetic Acids	28.5	17.8	40.8	60	ppb	Byproduct of drinking water disinfection.
2008	Total Trihalomethanes	42.8	31.5	55.3	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. EPA also requires the data to be reported here.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2007	Total Haloacetic Acids	19.1	0	39.1	NA	ppb	Byproduct of drinking water disinfection.
2007	Total Trihalomethanes	50.2	17	70.8	NA	ppb	Byproduct of drinking water disinfection.

Total Organic Carbon (TOC) – TOC has no adverse health effects. TOC provides a medium for the formation of disinfection byproducts when water is disinfected. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAAs) which are reported on elsewhere in this report.

Year	MCL	MCLG	Highest Average	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2008	TT	NA	3.29	2.58	4.23	ppm	Naturally present in the environment.

Chlorine Dioxide

Year	MCL	Highest Average	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2008	0.8	.04	0.0	0.56	ppm	Water additive used to control microbes.

Chlorite

Year	MCL	Highest Average	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2008	1.0	0.49	0.01	0.65	ppm	Byproduct of drinking water disinfection.

Lead and Copper

Year	Contaminant	The 90 th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2007	Lead	3.7	1	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2007	Copper	0.752	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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, 1.800.426.4791 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	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2008	Turbidity	0.43	98.00	0.3	NTU	Soil runoff.

Total Coliform

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	Contaminant	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Source of Contaminant
2008	Total Coliform Bacteria	0	*	Presence	Naturally present in the environment.

*** Two or more coliform found samples in any single month.**

FECAL COLIFORM: REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

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

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2008	Bicarbonate	110	108	111	NA	ppm	Corrosion of carbonate rocks such as limestone.
2008	Calcium	61.1	60.4	61.8	NA	ppm	Abundant naturally occurring element.
2008	Chloride	47	47	48	300	ppm	Abundant 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 CaCO 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.

This brochure is prepared to provide you with information about your drinking water. The City of Sachse contracts with the North Texas Municipal Water District (NTMWD) for the water supply to our citizens. Since its founding in 1951, the primary concern and responsibility of the NTMWD has been the conservation and preservation of clean, high quality, safe drinking water. This concern is shared by the City of Sachse who, with the NTMWD, has combined proper system operation and up-to-date technology to consistently provide safe, reliable, and high quality drinking water to all Sachse water customers. If you have issues or concerns you may contact the Sachse Public Works Department at 972.495.7600 or the NTMWD Public Information Office at 972.442.5405.

More information about contaminants and potential health effects may be obtained by calling EPA's Safe Drinking Water Hotline at 1.800.426.4791.