

2006 Annual Drinking Water Quality Report (Consumer Confidence Report)

CHISHOLM TRAIL SUD
Phone No.: 254-793-3103

***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. 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 (1-800-426-4791).

PUBLIC PARTICIPATION OPPORTUNITIES

Date: 3rd Thursday of each month

Time: 5 PM

Location: 851 FM 970
Florence, TX 76527

Phone No.: 254-793-3103

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

Our drinking water is regulated by the Texas Commission on Environmental Quality (TCEQ) and they have determined that certain water quality issues exist which prevent our water from meeting all of the requirements as stated in the Federal Drinking Water Standards. Each issue is listed in this report as a violation and we are working closely with the TCEQ to achieve solutions.

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.

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. 254-793-3103 para hablar con una persona bilingüe en español.

Where do we get our drinking water?

Our drinking water is obtained from GROUND & SURFACE water sources. It comes from the following: Edwards Aquifer North BFZ; Lake Georgetown; & Stillhouse Hollow Reservoir. 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 to focus our source water protection strategies. For more information on source water assessments and protection efforts at our system, please contact us.

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.

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)

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. MRDLGs 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.

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

CHISHOLM TRAIL SUD GROUND WATER SUPPLY

Inorganic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2002	Barium	0.043	0.043	0.043	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2002	Chromium	4.1	4.1	4.1	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits.
2005 2004	Fluoride	1.31	0.8	1.82	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2006 2004	Nitrate	1.12	0.1	2.13	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2002	Gross alpha	1.85	1.5	2.2	15	0	pCi/L	Erosion of natural deposits.

Organic Contaminants TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2006	Chloramine Residual	1.39	0.6	2.5	4	4	ppm	Disinfectant used to control microbes.

Disinfection Byproducts NOT REPORTED OR NONE DETECTED

Unregulated Contaminants

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

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2002	Bromodichloromethane	0.53	0	1.06	ppb	Byproduct of drinking water disinfection.
2002	Dibromochloromethane	1.05	0	2.09	ppb	Byproduct of drinking water disinfection.

Lead and Copper

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2004	Lead	5.8	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2004	Copper	0.201	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Turbidity NOT REQUIRED

CHISHOLM TRAIL SUD GROUND WATER SUPPLY - continued

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
2006	Total Coliform Bacteria	2	*	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.

VIOLATIONS

Violation Type	Health Effects	Duration	Explanation	Steps to Correct
TOTAL COLIFORM NON-ACUTE MCL - NO FECAL FOUND	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.	7/1/2006 to 7/31/2006	The positive "coliform found" results were due to operator sampling error.	Subsequent samples tested negative for total coliform bacteria, indicating that the water was safe for public use.

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
2005 2002	Bicarbonate	321	271	370	NA	ppm	Corrosion of carbonate rocks such as limestone.
2002	Calcium	78.1	78.1	78.1	NA	ppm	Abundant naturally occurring element.
2005	Chloride	20	20	20	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2002	Copper	0.022	0.022	0.022	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2002	Hardness as Ca/Mg	294	294	294	NA	ppm	Naturally occurring calcium and magnesium.
2002	Lead	0.003	0.003	0.003	NA	ppm	Corrosion of household plumbing systems; erosion of natural deposits.
2002	Magnesium	24.1	24.1	24.1	NA	ppm	Abundant naturally occurring element.
2002	Nickel	0.002	0.002	0.002	NA	ppm	Erosion of natural deposits.
2005 2002	pH	7.5	6.8	8.1	7	units	Measure of corrosivity of water.
2002	Sodium	11	11	11	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2005 2002	Sulfate	21	20	22	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2005 2002	Total Alkalinity as CaCO ₃	287	271	303	NA	ppm	Naturally occurring soluble mineral salts.
2005 2002	Total Dissolved Solids	343	320	366	1000	ppm	Total dissolved mineral constituents in water.
2002	Zinc	0.013	0.013	0.013	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.

CHISHOLM TRAIL SUD SURFACE WATER SUPPLY

Inorganic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2002 2006	Barium	0.04	0.029	0.049	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2002 2005	Chromium	3.1	1.2	6.1	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits.
2006	Fluoride	0.58	0.2	1.0	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2006	Nitrate	2.58	0.12	3.61	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Organic Contaminants TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

Maximum Residual Disinfectant Level

Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On the CCR report, the system must provide disinfectant type, minimum, maximum and average levels.

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2006	Chloramines	1.73	0.6	3.27	4.0	<4.0	ppm	Disinfectant used to control microbes.

Disinfection Byproducts

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2006	Total Haloacetic Acids	11.1	1.8	16.4	60	ppb	Byproduct of drinking water disinfection.
2006	Total Trihalomethanes	29.6	11.6	41.2	80	ppb	Byproduct of drinking water disinfection.

Unregulated Contaminants

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

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2006	Chloroform	3.08	0	9.8	ppb	Byproduct of drinking water disinfection.
2006	Bromoform	1.58	0	2.9	ppb	Byproduct of drinking water disinfection.
2006	Bromodichloromethane	2.91	1.2	7	ppb	Byproduct of drinking water disinfection.
2006	Dibromochloromethane	3.54	2.2	4.8	ppb	Byproduct of drinking water disinfection.

Lead and Copper

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2004	Lead	4.2	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2004	Copper	0.283	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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
2006	Turbidity	0.50	99.00	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 % of Positive Samples	MCL	Unit of Measure	Source of Contaminant
2006	Total Coliform Bacteria	2	*	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.

CHISHOLM TRAIL SUD SURFACE WATER SUPPLY - continued

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
2004 2002	Aluminum	0.053	0	0.114	50	ppm	Abundant naturally occurring element.
2006 2004	Bicarbonate	290	198	354	NA	ppm	Corrosion of carbonate rocks such as limestone.
2004 2002	Calcium	82.3	47.6	99.1	NA	ppm	Abundant naturally occurring element.
2006 2004	Chloride	19	17	20	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2004 2002	Copper	0.003	0	0.006	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2004 2002	Hardness as Ca/Mg	276	189	321	NA	ppm	Naturally occurring calcium and magnesium.
2004 2002	Magnesium	15.8	11.8	18.2	NA	ppm	Abundant naturally occurring element.
2004 2002	Nickel	0.002	0.001	0.003	NA	ppm	Erosion of natural deposits.
2006 2004	pH	7.5	7.3	7.7	7	units	Measure of corrosivity of water.
2004 2002	Sodium	13	10	14	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2006 2004	Sulfate	22	17	24	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2006 2004	Total Alkalinity as CaCO ₃	249	162	290	NA	ppm	Naturally occurring soluble mineral salts.
2006 2004	Total Dissolved Solids	330	237	370	1000	ppm	Total dissolved mineral constituents in water.
2004 2002	Zinc	0.01	0	0.029	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.