

Chisholm Trail Special Utility District 2010 Annual Drinking Water Quality Report

Consumer Confidence Report June 2011

This information is provided to you by: Chisholm Trail Special Utility District
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District Contact: Jennifer McKnight, General Manager

Special Population Advisory

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.

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.

Conservation

The most effective method for conserving water is to control use of water for landscape irrigation. Use of water for irrigation causes the peak demand in the summer that puts a strain on the system and eventually requires the installation of expensive treatment facilities. Starting May 1st each year mandatory restrictions are enforced that allow irrigation no more than three times per week between the hours of 6 p.m. and 8 a.m. The three times per week schedule is provided on our website located at www.ctsud.org.

Protect Your Drinking Water

The use of drinking water in many industrial processes requires the use of a functioning and properly-tested backflow prevention device. These devices prevent the inadvertent introduction of hazardous materials into the drinking water system by preventing flow of material in the reverse direction. Each device must be tested at least annually with the test results reported to CTSUD. Please visit the District website at www.ctsud.org for further information.

Water Quality Data

The table in this report lists all the drinking water contaminants we detected during tests conducted from the previous calendar year, unless otherwise noted. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Therefore, some of the data, though representative of the water quality, is more than one year old.

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 following pages. We hope this information helps you become more knowledgeable about what is in your drinking water. Should you have questions or need additional copies of this report, please call the District office at (254) 793-3103. The report is also available on our website at www.ctsud.org.

Public Participation Opportunities

Date: **3rd Thursday of each month**
Time: **5:30 p.m.**
Location: **Chisholm Trail SUD Office**
 851 FM 970
 Florence, TX 76527
Phone No.: **(254) 793-3103**

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 both surface and groundwater sources. Surface water comes from Lake Georgetown and groundwater comes from the Edwards Aquifer. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. 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. Some of this source water assessment information is available on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/> and for information regarding our source water protection efforts please call the office at (254) 793-3103.

All Drinking Water May Contain Contaminants

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. Sources 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 can pick up substances resulting from the presence of animals or from human activity. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791). Contaminants that may be present in source water before we treat it include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Turbidity*, which has no health effects, can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms
- *Inorganic contaminants*, such as salts and metals, can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- *Pesticides & herbicides*, which may come from a variety of sources such as agriculture and residential use.
- *Radioactive contaminants*, which are naturally occurring.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can come from gas stations, urban stormwater runoff, and septic systems.

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 concerns. Therefore secondary constituents 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 United States Environmental Protection Agency (EPA) requires water systems to test up to 97 constituents.

Definitions

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

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest permissible level of a contaminant in drinking water. MCL's are set as close to the MCLG's 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. MCLG's 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.

Abbreviations

MFL - million fibers per liter (a measure of asbestos)

N/A - not applicable

ND - not-detectable – laboratory analysis indicates that the constituent is not present.

NTU - Nephelometric Turbidity Units

ppq - parts per quadrillion, or picograms per liter

ppt - parts per trillion, or nanograms per liter

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 (ug/l)

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation (Y or N)	Source of Disinfectant
2010	Chloramine Residual	1.98	0.71	3.90	4.00	<4.00	ppm	N	Disinfectant used to control microbes.

Inorganic Contaminants

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Violation (Y or N)	Source of Contaminant
2006	Barium	0.05	0.043	0.081	2.00	2.00	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2006	Chromium	1.1	0	1.7	100	100	ppb	N	Discharge from steel and pulp mills; erosion of natural deposits.
2008	Fluoride	0.80	0.80	0.80	4	4	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2010	Nitrate	2.31	2.31	2.31	10.0	10.0	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2006	Combined Radium 226 & 228	0.38	0	2.4	5	0	pCi/L	N	Erosion of natural deposits
2006	Gross beta emitters	5.26	0	20.1	50	0	pCi/L	N	Decay of natural and man-made deposits.
2006	Gross Alpha	0.99	0	4.9	15	0	pCi/L	N	Erosion of natural deposits.

Organic Contaminants

TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

Disinfection By-Products

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Violation (Y or N)	Source of Contaminant
2010	HAA5 Total Haloacetic Acids	ND	ND	ND	60	ppb	N	Byproduct of drinking water disinfection.
2010	Total Trihalomethanes	0.5	ND	1.0	80	ppb	N	Byproduct of drinking water disinfection.

Unregulated Contaminants

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Violation (Y or N)	Source of Contaminant
2009	Chloroform	1.5	<1	1.5	ppb	N	Byproduct of drinking water disinfection.
2009	Bromoform	3.05	2.6	3.5	ppb	N	Byproduct of drinking water disinfection.
2009	Bromodichloromethane	2.15	1.6	2.7	ppb	N	Byproduct of drinking water disinfection.
2009	Dibromochloromethane	2.9	2.3	3.5	ppb	N	Byproduct of drinking water disinfection.

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

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. Any unregulated contaminants detected are reported in the following table. For additional information and data visit <http://www.epa.gov/safewater/ucmr/ucmr2/index.html>, or call the Safe Drinking Water Hotline at (800) 426-4791.

Turbidity

Year	Contaminant	MCL	MCLG	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Violation (Y or N)	Source of Contaminant
2010	Turbidity	TT	0.30	0.63	100	0.3	NTU	N	Soil runoff.

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.

Total Organic Carbon (Source Water: Lake Georgetown)

Year	Contaminant	MCL	MCLG	Highest Measurement	Lowest Monthly % of Samples Meeting Limit	Violation (Y or N)	Source of Contaminant
2010	Total Organic Carbon	N/A	N/A	3.29	100	N	Naturally occurring.

Lead and Copper

Year	Contaminant	The 90 th Percentile	No. of Sites Exceeding Action Level	Action Level	Unit of Measure	Violation (Y or N)	Source of Contaminant
2010	Lead	0.0034	0	15	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.
2010	Copper	0.12	0	1.3	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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. Chisholm Trail Special Utility District 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>.

Microbiological Contaminants

Year	Contaminant	MCL	MCLG	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Violation (Y or N)	Source of Contaminant
2010	Fecal Coliform & E. Coli	N/A	N/A	N/A	N/A	N	Human and animal fecal waste. No testing required.
2010	Total Coliform Bacteria	*	N/A	0	100	N	Naturally present in the environment.

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

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.

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

Year	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Violation (Y or N)	Source of Constituent
2008	Bicarbonate	365	365	365	N/A	ppm	N	Corrosion of carbonate rocks such as limestone.
2006	Calcium	67.8	10.6	90.4	N/A	ppm	N	Abundant naturally occurring element.
2008	Chloride	20	20	20	300	ppm	N	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2007	Iron	0.055	0	0.187	.3	ppm	N	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2006	Magnesium	16.9	6.4	20.1	N/A	ppm	N	Abundant naturally occurring element.
2007	Manganese	0.0018	0	0.0065	0.05	ppm	N	Abundant naturally occurring element.
2008	pH	7.2	7.2	7.2	>7.0	units	N	Measure of corrosivity of water.
2006	Sodium	63	14	227	N/A	ppm	N	Erosion of natural deposits; byproduct of oil field activity.
2008	Sulfate	20	20	20	300	ppm	N	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2008	Total Alkalinity as CaCO ₃	299	299	299	N/A	ppm	N	Naturally occurring soluble mineral salts.
2008	Total Dissolved Solids	375	375	375	1000	ppm	N	Total dissolved mineral constituents in water.
2008	Total Hardness as CaCO ₃	176	ND	664	N/A	ppm	N	Naturally occurring calcium.
2006	Zinc	0.012	0	0.02	5	ppm	N	Moderately abundant naturally occurring element used in the metal industry.

Violations

Type	Date Begin	Date End	Violation Explanation	Steps to Correct Violation
Routine Monitoring (DBP) - Major	04/01/10	12/31/10	Disinfectant Level Quarterly Operating Reports (DLQOR) were submitted electronically to TCEQ but hard copies were not submitted by the due date.	All reports were submitted in hard copy form and future reports will be mailed to TCEQ.