

# 2009 Annual Drinking Water Quality Report

## (Consumer Confidence Report)

### CRYSTAL CLEAR WATER SUPPLY CORPORATION

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#### **SPECIAL NOTICE**

#### **Required language for ALL community public water supplies:**

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immuno-compromised 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.

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#### **Public Participation Opportunities**

**Date:** July 22, 2010

**Time:** 9:00 A.M.

**Location:** 2370 F.M. 1979, San Marcos

**Phone Number:** (830) 372-1031

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

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#### *En Espanol*

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en espanol, favor de llamar al tel (830) 372-1031 – para hablar con una persona bilingue en espanol.

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

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**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.

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#### **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.

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#### **Where do we get our drinking water?**

Crystal Clear Water customers are fortunate because we enjoy an abundant water supply from our sources. Our drinking water is obtained from SURFACE AND GROUND water sources. It comes from the following Lake/River/Reservoir/Aquifers: Edwards Aquifer, Carrizo Aquifer, Lake Dunlap from the Guadalupe

River and the San Marcos River. 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. For more information on source water assessments and protection efforts at our system, please contact us.

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**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 (800) 426-4791.

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**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.

**DEFINITIONS**

**Maximum Contaminant Level (MCL)**

**Inorganic Contaminants**

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2009 2005	Barium	0.036	0.029	0.056	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries erosion of natural deposits

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.

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**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

**ppt** – parts per trillion, or nanograms per liter

**ppq** – parts per quadrillion, or picograms per liter

2009	2005	Chromium	0.8	0	2.4	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits
2009		Fluoride	0.34	0.13	0.88	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
2009		Nitrate	1.52	0.38	1.84	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural dep.

**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 Chemical
2009	Chloramines	2.21	.67	3.94	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
2009	Total Haloacetic Acids	24.6	0	36.6	60	ppb	Byproduct of drinking water disinfection
2009	Total Trihalomethanes	43.6	0	64.1	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	26.4	0	146.7	NA	ppb	Byproduct of drinking water disinfection
2007	Total Trihalomethanes	51.2	0	235.6	NA	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
2009 2008	Chloroform	14.98	0	47	ppb	Byproduct of drinking water disinfection
2009 2008	Bromoform	0.93	0	2.1	ppb	Byproduct of drinking water disinfection

2009	2008	Bromodichloromethane	10.12	0	24	ppb	Byproduct of drinking water disinfection
2009	2008	Dibromochloromethane	6.14	0	12	ppb	Byproduct of drinking water disinfection

### **Unregulated Contaminant Monitoring Rule 2 (UCMR2)**

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.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2009	NO DETECT	NO DATA				

### **Lead and Copper**

Year	Contaminant	The 90 <sup>th</sup> Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2009	Lead	5.7	0	15	ppb	Corrosion of household plumbing systems erosion of natural deposits
2009	Copper	0.611	0	13	ppb	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. 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 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	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2009	Turbidity	0.50	99.00	0.3	NTU	Soil runoff.

### **Fecal Coliform**

REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

### **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.\*Two or more coliform found samples in a month.

Year	Contaminant	Highest Monthly # of Positive Samples	MCL	Unit of Measure	Source of Contaminant
2009	Total Coliform Bacteria	1	*	Presence	Naturally present in the environment

### **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 Contaminant
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2009	2005	Aluminum	0.051	0	0.134	.05	ppm	Abundant naturally occurring element
2009	2008	Bicarbonate	261	167	334	NA	ppm	Corrosion of carbonate rocks such as limestone
2009	2005	Calcium	78.1	60.2	89.6	NA	ppm	Abundant naturally occurring element
2009	2008	Chloride	21	13	32	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2009	2005	Copper	0.009	0	0.03	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2008	2005	Hardness as Ca/Mg	274	198	313	NA	ppm	Naturally occurring calcium and magnesium
2009	2005	Iron	0.003	0	0.013	.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities
2009	2005	Magnesium	15.3	13.9	16.7	NA	ppm	Abundant naturally occurring element
2009	2005	Nickel	0.002	0	0.003	NA	ppm	Erosion of natural deposits
2009	2008	pH	7.6	7	8.1	>7.0	ppm	Measure of corrosivity of water
2009	2005	Sodium	11	7	17	NA	ppm	Erosion of natural deposits; byproduct of oil field activity
2009	2008	Sulfate	28	20	33	300	ppm	Naturally occurring; common industrial by-product; byproduct of oil field activity
2009	2008	Total Alkalinity as CaCO <sub>3</sub>	239	167	274	NA	ppm	Naturally occurring soluble mineral salts
2009	2008	Total dissolved Solids	335	242	366	1000	ppm	Total dissolved mineral constituents in water
2009	2005	Total Hardness as CaCO <sub>3</sub>	270	267	272	NA	ppm	Naturally occurring calcium
2009	2005	Zinc	0.006	0	0.012	5	ppm	Moderately abundant naturally occurring element; used in the metal industry