

# owley 2006 Annual Drinking Water Quality Report

(Consumer Confidence Report)

Customer Service: 817-297-2201 Emergency, Nights & Weekends: 817-297-2276

#### Special Notice for 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:** City Council meetings are 1<sup>st</sup> and 3<sup>rd</sup> Thurs. of

each month

**Time:** 7:00 pm

Location: City Hall

**Phone No:** 817-297-2201

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

## Where do we get our drinking water?

Our drinking water is obtained from GROUND water sources. It comes from the following Lake/River/Reservoir/Aquifer: SURFACE WATER, TRINITY AND TRINITY/PALUXY. A Source Water Susceptibility Assessment for your drinking water source(s) 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 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. The 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.

#### **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.

WATER SOURCES: The sources of drinking water (both tap 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 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. (817)297-2201-para hablar con una persona bilingue en espanol.

#### **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

#### **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 fivers 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 – pars per billion, or micrograms per liter ( $\mu g/L$ )

ppt – part per trillion, or nanograms per liter

ppq – parts per quadrillion, or picograms per liter

#### **Inorganic Contaminants** Average Minimum Maximum Unit of MCL MCLG Contaminant Source of Contaminant Year or Level Level Level Measure Range Discharge of drilling wastes; discharge from metal 2002 Barium 0.022 0.006 0.035 2 2 ppm refineries; erosion of natural deposits Erosion of natural deposits; water additive which 2005 Fluoride 0.75 0.6 1.2 4 4 promotes strong teeth; discharge from fertilizer and ppm aluminum factories Runoff from fertilizer use; leaching from septic Nitrate 0.29 2006 0.06 0.65 10 ppm tanks, sewage; erosion of natural deposits. Combined Erosion of natural deposits. 0 2002 Radium 226 0.1 0 0.6 5 pCi/L & 228 Erosion of natural deposits. 2002 Gross alpha 0.15 0 0.9 15 0 pCi/L TESTING WAIVED, NOT REPORTED, OR NONE DETECTED **Organic Contaminants** Maximum Residual Disinfectant Level Disinfectant Minimum Maximum MRDL MRDLG Unit of Source of Disinfectant Year Average Measure Level Level Level Chlorine Disinfectant used to control microbes. 2006 .028 0.2 0.9 4 4 ppm Residual, Free **Disinfection Byproducts** MCL Unit of Source of Contaminant Year Contaminant Average Minimum Maximum Level Level Level Measure

2006 Total Trihalomethanes 8.9 8.9 8.9 Byproduct of drinking water disinfection.

Average Level Level Measure

Measure Byproduct of drinking water disinfection.

Byproduct of drinking water disinfection.

Unregulated Contaminants

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

these enemicals at the entry point to distribution.										
Year or	Contaminant	Average	Minimum	Maximum	Unit of	Source of Contaminant				
Range		Level	Level	Level	Measure					
2006 2002	Chloroform	2.53	0	5.4	ppb	Byproduct of drinking water disinfection.				
2006 2002	Bromoform	0.33	0	1.2	ppb	Byproduct of drinking water disinfection.				
2006 2002	Bromodichloromethane	1.67	0	4.9	ppb	Byproduct of drinking water disinfection.				
2006 2002	Dibromochloromethane	1.05	0	4.2	ppb	Byproduct of drinking water disinfection.				

Lead and Copper

Year	Contaminant	The 90 <sup>th</sup>	The 90 <sup>th</sup> Number of Sites		Unit of	Source of Contaminant
		Percentile	Exceeding Action Level	Level	Measure	
2004	Lead	2.2	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2004	Copper	0.286	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Turbidity	y					

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 Lowest Monthly % of Turbidity Unit of Source of Contaminant Measurement Samples Meeting Limits Limits Measure Turbidity 0.40 2006 99.00 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.

Trainer Consumption										
Year	Contaminant	Highest Monthly Number	MCL	Unit of Measure	Source of Contaminant					
		of Positive Samples								
2006	Total Coliform Bacteria	1	*	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 associa	ted adverse health e	ffects)					
Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2005	Bicarbonate	214	167	421	NA	ppm	Corrosion of carbonate rocks such as limestone.
2002	Calcium	14.9	0	45.9	NA	ppm	Abundant naturally occurring element.
2005	Chloride	31	24	62	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2005	Copper	0.009	0	0.034	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2002	Iron	0.011	0	0.03	.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2002	Lead	0.001	0	0.003	NA	ppm	Corrosion of household plumbing systems; erosion of natural deposits.
2002	Magnesium	1	0	3.5	NA	ppm	Abundant naturally occurring element.
2005	pН	8.1	8	8.2	7	units	Measure of corrosivity of water.
2002	Sodium	175	42	298	NA	ppm	Erosion of natural deposits; by product of oil field activity.
2005	Sulfate	35	31	53	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oilfield activity.
2005	Total Alkalinity as CaCO3	175	137	345	NA	ppm	Naturally occurring soluble mineral salts.
2005	Total Dissolved Solids	283	223	538	1000	ppm	Total dissolved mineral constituents in water.
2002	Total Hardness as CaCO3	41	0	129	NA	ppm	Naturally occurring calcium.

Contaminants Found in Fort Worth Drinking Water Year 2006 Results

Contaminant	Measure	MCL	2005 Level	Range of Detects	MCLG	Common Sources of Substance in Drinking Water
Barium <sup>1</sup> ppm 2		2	0.058	0.033 to 0.058	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beta particles & Photon emitters <sup>2</sup>	pCi/L	50	6.6	4.6 to 5.6	N/A	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beat radiation
Fluoride	ppm	4	1.08	0.22 to 1.08	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	0.31	0.23 to 0.31	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (measured as ppm 1 Nitrogen)		1	0.035	0 to 0.035	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Bromate	ppb	10	4.6	0 to 4.6	0	Byproduct of drinking water disinfection
Haloacetic Acids	ppb	60	16.6	7 to 16.6	N/A	Byproduct of drinking water disinfection
Total Trihalomethanes	Trihalomethanes ppb 80 38.1		38.1	13.1 to 38.1	N/A	Byproduct of drinking water disinfection
Total Coliforms (including fecal coliform & E. coli)	% of positive samples	Presence in 5% of monthly samples	Presence in 0.80% of monthly samples	0 to 0.8	0	Coliforms are naturally present in the environment as well as feces; fecal Coliforms and E. coli only come from human and animal fecal waste
Turbidity <sup>3</sup>	NTU	NTU TT	0.42 Highest single Result	N/A	N/A	Soil Runoff
			98.9% Lowest monthly % of samples<0.3 NTU			
Contaminant	Measure	MRDL	2006 Level	Range of Detects	MRDLG	Common Sources of Substance in Drinking Water
Chloramines	ppm	4	4.5	1.5 to 4.5	4	Water additive used to control microbes
Contaminant	Measure	90 <sup>th</sup> percentile5	# of sites exceeding action level	MCL	MCLG	Common Sources of Substance in Drinking Water
Lead4	ppb	2.4	0	Action Level =15	N/A	Corrosion of household plumbing systems erosion of natural deposits
Copper4	ppm	0.457	0	Action Level=1.3	N/A	Corrosion of household plumbing systems; erosion of natural deposits
Contaminant	High	Low	Average	MCL	MCGL	Common Sources of Substance in Drinking water
Total Organic Carbon6	1	1	1	TT = % removal	N/A	Naturally occurring

<sup>&</sup>lt;sup>1</sup> Because Fort Worth historically has had low levels of metals in its water, the Texas Commission on Environmental Quality (TCEQ) requires this monitoring occur only once ever six years. The test results shown above are from 2002. The next monitoring will occur in 2008.

Unregulated Contaminants7

Contaminants	unit	Range of Detections	2005 Level	MCL	MCLG	Common Sources of Substance in Drinking Water			
Chloral Hydrate	ppb	0.1 to 2	2	Not Regulated	0	By-product of drinking water disinfection			
Bromoform	ppb	0 to 3	3	Not Regulated	0				
Bromodichloromethane	ppb	0 to 19	19	Not Regulated	0	By-product of drinking water disinfection; not regulated individually; included in			
Chloroform	ppb	0 to 23	23	Not Regulated	0	Haloacetic Acids			
Dibromochloromethane	ppb	0 to 12	12	Not Regulated	60				
Dichloroacetic Acid	ppb	3 to 15	15	Not Regulated	0	By-product of drinking water disinfection			
Trichloroacetic Acid	ppb	3 to 6	6	Not Regulated	300	not regulated individually; included in Total Trihalomethanes			
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7 Unregulated contaminants 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.

<sup>&</sup>lt;sup>2</sup> Because Fort Worth historically has had low levels of radionuclides in its water, TCEQ requires this monitoring occur only once every three years. The test results shown above are from 2005. The next monitoring will occur in 2008.

<sup>&</sup>lt;sup>3</sup> Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

<sup>&</sup>lt;sup>4</sup> Because Fort Worth historically has had low levels of lead and copper in its water, the TCEQ requires this monitoring occur only once every three years. The test results shown above are from 2005. The next monitoring will occur in 2008.

<sup>&</sup>lt;sup>5</sup> 90th percentile value: 90% of the samples were at or below this value. EPA considers the 90th percentile value the same as an "average" value for other contaminants. Lead and copper are regulated by a Treatment Technique that requires systems to control the corrosiveness of their water. If more than 10% of tap water samples exceed the action level, water systems must take additional steps.

<sup>&</sup>lt;sup>6</sup> Total Organic Carbon is used to determine disinfection by-product precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors

# **ATTENTION: Residents and Business Owners**

The City of Crowley is under mandatory watering restrictions. NO outdoor watering by use of sprinklers can be done between the hours of 10:00 am and 6:00 pm from June 1st through September 30th. The use of a soaker hose and/or watering by hand is still allowed.