2008 Annual Drinking Water Quality Report (Consumer Confidence Report)

CITY OF RIVER OAKS, TEXAS

4900 RIVER OAKS BLVD.

SYSTEM IDENTIFICATION NUMBER: 2200069

Phone No. (817) 626-5421 **Fax No. (**817) 624-2154 ***Website:*** *www.riveroakstx.com*

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. 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

City Council Meetings: 2nd & 4th Tuesdays each month at 7:00 P.M. in the City Council Chambers located at 4900 River Oaks Blvd. in River Oaks, Texas. To learn more about future meetings (concerning your drinking water), or to schedule one, please call us at 817-626-5421, extension 324.

WATER AWARENESS

Even with the recent rains, Water Customers are requested to voluntarily reduce water use. We request voluntary limitations in landscape watering between 10:00 A.M. and 7:00 P.M.

THE CITY OF RIVER OAKS IS A SUPERIOR WATER SYSTEM RECOGNIZED BY T.C.E.Q.

WATER RATES: For the most recently adopted water rates, please contact the Water Administration Department at (817) 626-5421.

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 aqua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (817)626-5421- para hablar con una persona bilingüe en español.

Personas del Contacto: *Belinda Hernandez o Rosa Flores*

WHERE DO WE GET OUR DRINKING WATER?

Our drinking water is obtained from surface water sources. It comes from *LAKE WORTH.* A Source Water Susceptibility Assessment for your drinking water sources(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 the 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 Environmental Protection Agency's (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.

CRYPTOSPORIDIUM MONITORING INFORMATION

Cryptosporidium is a microbial pathogen that may be found in water contaminated by feces. Although filtration removes Cryptosporidium, it cannot guarantee 100 percent removal nor can the testing methods determine if the organisms are alive and capable of causing cryptosporidiosis, an adnominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water. Tarrant Regional Water District (TRWD) samples the raw water periodically for Cryptosporidium. NO reported detection in 2008.

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

TOTAL AND FECAL 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	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

MAXIMUM RESIDIAL 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	Min Level	Max Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2008	Chloramines	1.10 mg/L	0.5 mg/L	3.0 mg/L	4.0	<4.0	ppm	Disinfectant used to control microbes

INORGANIC CONTAMINANTS

Year or Range	Contaminant	Ave. Level	Min. Level	Max. Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	Fluoride	0.16	0.16	0.16	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2008	Nitrate	0.08	0.08	0.08	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2005	Gross beta emitters	3.8	3.8	3.8	50	0	pCi/L	Decay of natural and man-made deposits.

ORGANIC CONTAMINANTS: TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

DISINFECTION BYPRODUCTS

Year	Contaminant	Ave. Level	Min. Level	Max. Level	MCL	Unit of Measure	Source of Contaminant
2008	Total Haloacetic Acids	25.3	7.8	44	60	ppb	Byproduct of drinking water disinfection
2008	Total Trihalomethanes	85.6	71.5	97.2	80	ppb	Byproduct of drinking water disinfection

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts: Waived or not yet sampled

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	Min. Level	Max Level	Unit of Measure	Source of Contaminant
2008	Chloroform	34.99	34.99	34.99	ppb	Byproduct of drinking water disinfection
2008	Bromoform	1.84	1.84	1.84	ppb	Byproduct of drinking water disinfection
2008	Bromodichloromethane	28.27	28.27	28.27	ppb	Byproduct of drinking water disinfection
2008	Dibromochloromethane	14.27	14.27	14.27	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
2007	Lead	3.8	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2007	Copper	0.094	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

RECOMMENDED ADDITIONAL HEALTH INFORMATION FOR LEAD: All water systems are required by EPA to report the language below starting with the 2009 CCR to be delivered to you by July of 2010. We are providing this information now as a courtesy.

"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 at the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead."

VIOLATIONS

VIOLATION TYPE	HEALTH EFFECTS	DURATION	EXPLANATION	STEPS TO CORRECT
DISTRIBUTION: CHEMICALS-FAILURE TO MONITOR OR REPORT 5 HALOACETIC ACIDS	We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards and is safe for consumption. We did not fully complete all monitoring and/or report the results of that monitoring for drinking water contaminants, and therefore cannot be sure of the quality of our drinking water.	10/01/2008 TO 12/31/2008	Payment was not received by the Laboratory on time and results were withheld pending payment.	Payment has been made and the City is now in compliance. NOT A MCL VIOLATION
DISTRIBUTION: CHEMICALS– FAILURE TO MONITOR OR REPORT TOTAL TRIHALOMETHANES	We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards and is safe for consumption. We did not fully complete all monitoring and/or report the results of that monitoring for drinking water contaminants, and therefore cannot be sure of the quality of our drinking water.	10/01/2008 TO 12/31/2008	Payment was not received by the Laboratory on time and results were withheld pending payment.	Payment has been made and the City is now in compliance. NOT A MCL VIOLATION
DISTRIBUTION: MCL VIOLATION– TOTAL TRIHALOMETHANES (TTHM)	Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their Liver, Kidneys, or Central Nervous Systems, and may have an increased risk of getting cancer.	7/01/2008 TO 9/30/2008	Running annual average for quarter 3 was 0.087 mg/L. The MCL is 0.080 mg/L	Engineer recalculated the dosage of the Liquid Ammonium Sulfate System in an effort to reduce TTHM level.
DISTRIBUTION: MCL VIOLATION –TOTAL TRIHALOMETHANES (TTHM)	Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their Liver, Kidneys, or Central Nervous Systems, and may have an increased risk of getting cancer.	10/01/2008 TO 12/31/2008	Running annual average for quarter 4 was 0.086 mg/L. The MCL is 0.080 mg/L	TRWA will send a team of experts to the Plant to analyze the chlorination system for TTHM reduction .

Secondary and Other Constituents Not Regulated (No associated adverse health effects)							
Year or Range	**Constituent**	**Ave. Level**	**Min Level**	**Max Level**	**Secondary Limit**	**Unit of Measure**	**Source of Constituent**
2008	Bicarbonate	123	123	123	NA	ppm	Corrosion of carbonate rocks such as limestone
2008	Chloride	26	26	26	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2008	Hardness as Ca/Mg	138	138	138	NA	ppm	Naturally occurring calcium and magnesium
2008	P. Alkalinity as CaCO3	2	2	2	NA	ppm	Naturally occurring soluble mineral salts
2008	PH	8.6	8.6	8.6	>7.0	units	Measure of corrosivity of water
2008	Sulfate	50	50	50	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity
2008	Total Alkalinity as CaCO3	128	128	128	NA	ppm	Naturally occurring soluble mineral salts
2008	Total Dissolved Solids	270	270	270	1000	ppm	Total dissolved mineral constituents in water

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	0.30	100.00	0.3	NTU	Soil Runoff

TOTAL ORGANIC CARBON

Total Organic Carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include Trihalomethanes (THM's) and Haloacetic Acids (HAA) which are reported elsewhere in this report. * Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2008	Source Water	5.91	5.10	6.90	ppm	Naturally present in the environment
2008	Drinking Water	4.00	3.50	4.40	ppm	Naturally present in the environment
2008	Removal Ratio	1.28	0.94	1.57	ppm	N/A

About This Report

This Water Quality Report, also know as "The Consumer Confidence Report" (CCR), is published to the public as mandated by the EPA as controlled by the Texas Commission on Environmental Quality (TCEQ). Our water system is under the regulations mandated by the "Surface Water Rule" for drinking water supply systems in the State of Texas.

Your 2008 Drinking Water Quality Report

This report details where your water comes from, what it contains and how that it compares with regulatory standards. We want you to know this information so you will be able to understand and support the improvements necessary to maintain the highest drinking water standards.

MAILING LABEL

City of River Oaks
Water Department
4900 River Oaks Blvd.
River Oaks, Texas 76114-3007

First Class Mail
U.S. POSTAGE
PAID
River Oaks, Texas
Permit No. 855