

# 2009 Annual Drinking Water Quality Report

## HARRIS COUNTY MUD No. 44

*Yes, your water is safe to drink*



### OUR WATER MEETS ALL FEDERAL (EPA) AND STATE REQUIREMENTS

The Texas Commission on Environmental Quality (TCEQ) assessed our system, Harris County Municipal Utility District No. 44 (MUD 44), and determined that our water is safe to drink. The analysis was made by using the data in the tables in this report which uses testing results from 2005 through 2009.

Because our water meets all state and federal drinking water health standards for the sampling period, there may not be any health based benefits to purchasing bottled water or point of use devices. MUD 44 system identification number is 101-0718. We hope this information helps you become more knowledgeable about what's in your drinking water.

**En Español – Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o discusiones sobre este reporte en espanol, favor de llamar al tel. 281.376.8802 par hablar con una persona bilingue en espanol.**

**TABLE INFORMATION** The tables contain chemical constituents which have been found in your drinking water. The TCEQ and the Environmental Protection Agency (EPA) require water systems to test up to 97 constituents. Only six regulated constituents were detected in MUD 44's water, and these were well below the maximum contaminant level allowed in drinking water. The agencies do not require some contaminants to be monitored annually because their concentrations are not expected to vary. This report states the results of the most current water testing from 2005 through 2009.



REGULATED INORGANICS									
Year Tested	Contaminant Detected	Unit of Measure	Average Level*	Minimum Level*	Maximum Level*	Allowed (EPA's MCL)	MCLG	Meets Standards	Possible source of Contaminant
2005	Arsenic †	ppb	3.800	3.800	3.800	10.0*	0.0	yes	Erosion of natural deposits
*The arsenic MCL of 10 became effective January 23, 2006. Prior to that date the MCL was 50 ppb. Currently, a MCLG has not been established.									
2005	Barium	ppm	0.108	0.108	0.108	2.0	2.0	yes	Erosion of natural deposits
2009	Fluoride **	ppm	2.710	2.710	2.710	4.0	4.0	yes	Erosion of natural deposits
2009	Nitrate	ppm	0.010	0.010	0.010	10.0	10.0	yes	Erosion of natural deposits
UNREGULATED INORGANICS									
2005	Sodium	ppm	271.00	271.00	271.00	no standards set			Erosion of natural deposits

\* When there is only one sample, the average, minimum, and maximum will be the same number.

‡ ‡ **Fluoride in drinking water** at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Parents with children in this age group may wish to seek advice from their children's Dentist.

### ‡ ‡ FLUORIDE PUBLIC NOTIFICATION

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 ppm of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by MUD 44 has a fluoride concentration of 2.71 ppm. MUD 44's Public Water System ID is No. 101-0718.

Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water. Drinking water containing more

than 4.0 ppm of fluoride (the U.S. EPA's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4.0 ppm of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2.0 ppm because of this cosmetic dental problem.

‡ **ARSENIC** While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

**SECONDARY CONSTITUENTS** Many contaminants (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. These constituents are called secondary contaminants and are regulated by the State of Texas, not EPA. The secondary constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document, but they may greatly affect the appearance and taste of your water.

### TERMS USED IN THIS REPORT

**Contaminant:** The technical term for anything else in water except pure water is "contaminant." Technically, pure, fresh orange juice can be considered water which has been "contaminated" by the oil, orange pulp and flavorings in the orange which make it taste so good.

Obviously, some contaminants aren't good and can actually be hazardous to your health at specific levels. Those are the that are tested and measured.

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which water systems must follow.

**MCL, Maximum Contaminant Level:** The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. MCLs are set at very stringent levels.

**MCLG, Maximum Contaminant Level Goal:** 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.

**MRDL, Maximum Residual Disinfectant Level:** 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.

**MRDLG, Max. Residual Disinfectant Level Goal:** 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.

**n/a:** not established at this time

**ppm – Part per million:** One part per million equals 1 teaspoon in 1,302 gallons, which is enough water to fill a typical bathtub over 40 times.

**ppb – Part per billion:** One part per billion equals 1 teaspoon in 1,302,000 gallons, which is enough water to fill a typical bathtub over 40,000 times.

**WHAT'S IN THE WATER** In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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** or at [www.epa.gov/safewater](http://www.epa.gov/safewater).



Bottled water information may be obtained at: [www.nrdc.org/water/drinking/bw/bwinx.asp](http://www.nrdc.org/water/drinking/bw/bwinx.asp).

UNREGULATED CONTAMINANT						
Year Tested	Contaminant	Unit of Measure	Average Level*	Minimum Level*	Maximum Level*	Source of Contaminant
2009	Bromoform	ppb	3.40	3.40	3.40	The Unregulated contaminants listed are a byproduct of the drinking water disinfection.
2009	Chloroform	ppb	0.60	0.60	0.60	
2009	Dibromochloromethane	ppb	2.80	2.80	2.80	

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.

DISINFECTANT RESIDUALS								
Year Tested	Contaminant Detected	Unit of Measure	Average Level	Minimum Level	Maximum Level	MRDCL	MRDCLG	Source of Contaminant
2009	Free Chlorine	ppm	1.540	0.700	2.900	4.0	4.0	Disinfectant used to control microbes

DISINFECTANT BYPRODUCTS							
Year	Constituent	Unit	Average*	Minimum*	Maximum*	MCL	Possible Source of Contaminant
2007	Total Haloacetic Acids	ppb	3.800	3.800	3.800	60.0	Byproduct of drinking water disinfection
2007	Total Trihalomethanes	ppb	35.900	35.900	35.900	80.0	Byproduct of drinking water disinfection

\* When there is only one sample, the average, minimum, and maximum will be the same number.

LEAD AND COPPER – TESTED AT THE CUSTOMER'S TAP (SAMPLES WERE COLLECTED AT 10 HOMES)						
Year Tested	Substance	Unit of Measure	90th Percentile	Number of Homes Exceeding Action Level	Action Level	Possible Sources of Lead and Copper
2009	Lead	ppb	3.500	1 of 10	15.0	Corrosion of household plumbing systems;
2009	Copper	ppm	0.094	0 of 10	1.3	Erosion of natural deposits

**INFORMATION ON LEAD IN WATER** 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 from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

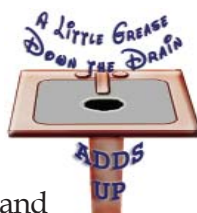


### ADDITIONAL TESTING

Additional testing is done daily at the water plant and throughout the community at various locations to ensure that a safe level of disinfectant is in the system. Water samples are sent to an independent state approved laboratory to verify the absence of harmful bacteria. No such bacteria has been detected in this water system.

### HOW TO DISPOSE OF GREASE

Please put your grease in a container with a lid and then dispose of in your trash. Grease can create sewer backups in your household lines and in the District's sewer lines causing expensive repairs.



### OUTSTANDING PERFORMANCE

MUD 44 has been awarded Outstanding Performance Certificates for no violations of the Safe Drinking Water Act bacteriological sampling rule from 2001 – 2007. The District continues with the same performance record to date.

### WHERE YOUR WATER COMES FROM

In the past your water came from 2 wells that pump ground water from Gulf Coast Aquifers. This summer MUD 44 will begin receiving surface water from the North Harris County Regional Water Authority.

The District maintains interconnect valves with Harris County MUD No. 16, Bammel Utility District (Oak Creek Village and Section 2 of Olde Oaks), Harris County MUD No. 211 (Northgate Forest) and NW Harris County MUD No. 20 (Olde Oaks 3). These Districts are all governed by the same drinking water regulations as MUD 44.

### HAVE QUESTIONS

If you would like more information about particular health risks or contaminants, you may call the EPA at 1.800.426.4791, or the Harris County Health Department at 713.439.6000.



EPA has answers to many questions at [www.epa.gov/safewater/ccr/frequentquestions](http://www.epa.gov/safewater/ccr/frequentquestions). The District's Operator, Water District Management (WDM), may also be able to assist you with your questions, 281.376.8802.

### SOURCE WATER ASSESSMENT

Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the TCEQ.

This information describes 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 allows us to focus our source water protection strategies.

Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at [dww.tceq.state.tx.us/DWW/](http://dww.tceq.state.tx.us/DWW/).

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

### 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, those that are undergoing treatment with steroids, 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

MUD 44 meets on the second Tuesday of each month at 7:00 p.m. at the District's office building at 16030 TC Jester (north end of TC Jester). Any last minute cancellations will be posted at that location. Call 281.376.8802 for directions.